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ELECTRIC MOTOR USAGE, REPAIR, AND REPLACEMENT
PRACTICES AT KANSAS ARMY AMMUNITION PLANT

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total of 1,985 motors were inventoried, of which 854 were active and 1,131 were inactive. It was determined that current practices are cost effective. Reduction of energy consumption by replacement of motors with premium priced, higher efficiency motors was examined. Only thirty-one motors qualified for economic replacement when the present motor fails. No motors qualified for immediate replacement since the expected reduction in operating costs could not amortize the cost of a new motor in any reasonable length of time. Standardization of motors and efficiency improvement through application of capacitors and power factor controllers were considered and determined not to be cost effective. Care in specifying replacement motors over the years has resulted in very few motors which are oversized for their application. Corrective action will be taken in these few instances.

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INTRODUCTION

The purpose of this study was to develop a plan for reducing electrical energy consumption at Kansas Army Ammunition Plant (KAAP) through the use of properly-sized and energy efficient electric motors. An inventory was to be performed of all KAAP electric motors rated greater than one-quarter horsepower and pertinent motor data and applications were to be recorded. The information compiled was to be used to determine where deficiencies exist and to develop a means for orderly elimination of those deficiencies. A comparison was to be made involving the applicability of high efficiency electric motors versus standard models at KAAP. A determination was to be made relative to the value of standardizing motors for specific applications.

There are presently 1,985 electric motors at KAAP that have a rating greater than one-quarter horsepower. Of these, 854 are active and 1,131 are inactive. Due to the diversity of the load, assemble, and pack operations and various support equipment, these motors range in size up to 400 horsepower with annual electricity costs ranging up to \$24,000.

STUDY PROCEDURE

The initial phase of this study involved reviewing the production history of KAAP, researching for sources of KAAP electric motor information, reviewing the normal practice for procurement of motors, assessing the types of motor applications that would be involved, assigning maintenance and engineering personnel to the study, and purchasing equipment.

The second phase primarily consisted of performing the motor inventory and recording pertinent motor data. Manufacturer literature was collected during this phase also.

The third phase of this study concentrated on analyzing the motor data obtained in the second phase and the manufacturer information received. Raw motor data was organized, edited, and entered onto computer files to facilitate further analysis and preparation of the final

report. During this phase, data omissions were noted and additional field work performed.

The final phase involved preparation of tables and other support data for the final report.

KAAP PRODUCTION HISTORY AND CURRENT STATUS

The Secretary of War authorized the feasibility study and the preparation of the development package for KAAP, originally identified as the Kansas Ordnance Plant, on 31 May 1940. On 4 August 1941, the Secretary authorized the construction of three load lines, one each for the 105-mm artillery projectile, the 155-mm artillery projectile, and the 100-pound bomb. Also authorized was construction of facilities for: production of fuzes, boosters, detonators, and primers for the foregoing ammunition; manufacture of amatol and ammonium nitrate; administrative, maintenance, and support activities; and the necessary utilities.

Initial production began in July 1942 and continued until August 1945. During this period, artillery ammunition, bombs, and components for artillery projectiles (such as fuzes, boosters, detonators, relays, and primers) were assembled and ammonium nitrate was produced. The plant was placed on a standby basis in September 1945 and continued on this basis until August 1950.

During August 1950 the Ordnance Corps issued instructions for partial reactivation of the plant. By September 1954 all production lines had been reactivated, and the ammonium nitrate area had been converted to a cartridge case rework area. Items produced consisted of bombs, artillery ammunition and component parts, and reworked 105-mm cartridge cases. Subsequent to the signing of the Korean Truce, production schedules gradually diminished. Upon completion of production orders, the applicable area was decontaminated and laid away. The layaway of the last active production line was completed in July 1957. The plant was again placed on a standby basis, and continued on this basis until December 1966.

During December 1966, the Ordnance Corps issued instructions for reactivation of the plant in support of the Southeastern Asia situation. This reactivation operation commenced in early 1967. With the exception of the cartridge case rework area, all production facilities

were activated. The 100-pound demolition bomb line (1100 area) was converted to a cluster bomb unit (CBU) line, the 105-mm artillery projectile line (900 area) was equipped for loading 81-mm mortar cartridges, and the 155-mm artillery projectile line (1000 area) was converted to a 105-mm artillery projectile line. Items produced consisted of cluster bomb units, 105-mm artillery projectiles, 81-mm mortar cartridges, detonators, fuzes, primers, and lead cup assemblies.

Following cessation of the Southeast Asia situation, production schedules gradually diminished again. Upon completion of the production orders, the applicable area was decontaminated and laid away. By 1975 five of the eight production lines had been placed in an inactive state. Another production area (105-mm artillery projectile) remained active until June 1978, when it was placed in an inactive state. A lead azide production facility (3000 area) was completed in September 1968, partially tested, and placed in an inactive state during 1971.

The production and support facilities at KAAP are identified by their location in numbered areas (fig. 1). Buildings having a number between 900 and 999, for example, are located in the 900 area. The 100 area houses the administration offices, safety and security offices, hospital, communications center, and the laundry. The 200 area includes the maintenance shops, warehousing, and offices for the equipment and property control and maintenance supervision staffs. The 300 area operates on a one-shift (1-8-5) production schedule to load, assemble, and pack the projectile M483. A short term shell rework project is operating on a separate shift (1-8-5) at this time but will terminate in September 1982. The 500 area is in layaway status at this time but has been used to load, assemble, and pack the artillery fuzes M716 and M717. The 700 area operates on a one-shift (1-8-5) production schedule to load, assemble, and pack the detonator M55 and expulsion charges. The 800 area is in layaway status at this time but would be reactivated during mobilization to load, assemble, and pack the artillery primer M28B2. The 900 area is in partial layaway status at this time. A rework operation utilizes three buildings on a single shift (1-8-5) basis. During mobilization, this line is scheduled to load, assemble, and pack the 81-mm mortar cartridge. The 1000 area is in layaway status at this time but is scheduled to load, assemble, and pack the 105-mm projectile during mobilization. The 1100 area is in partial layaway status at this time with several buildings being used to support production of the Anti-Armor Cluster Munition.

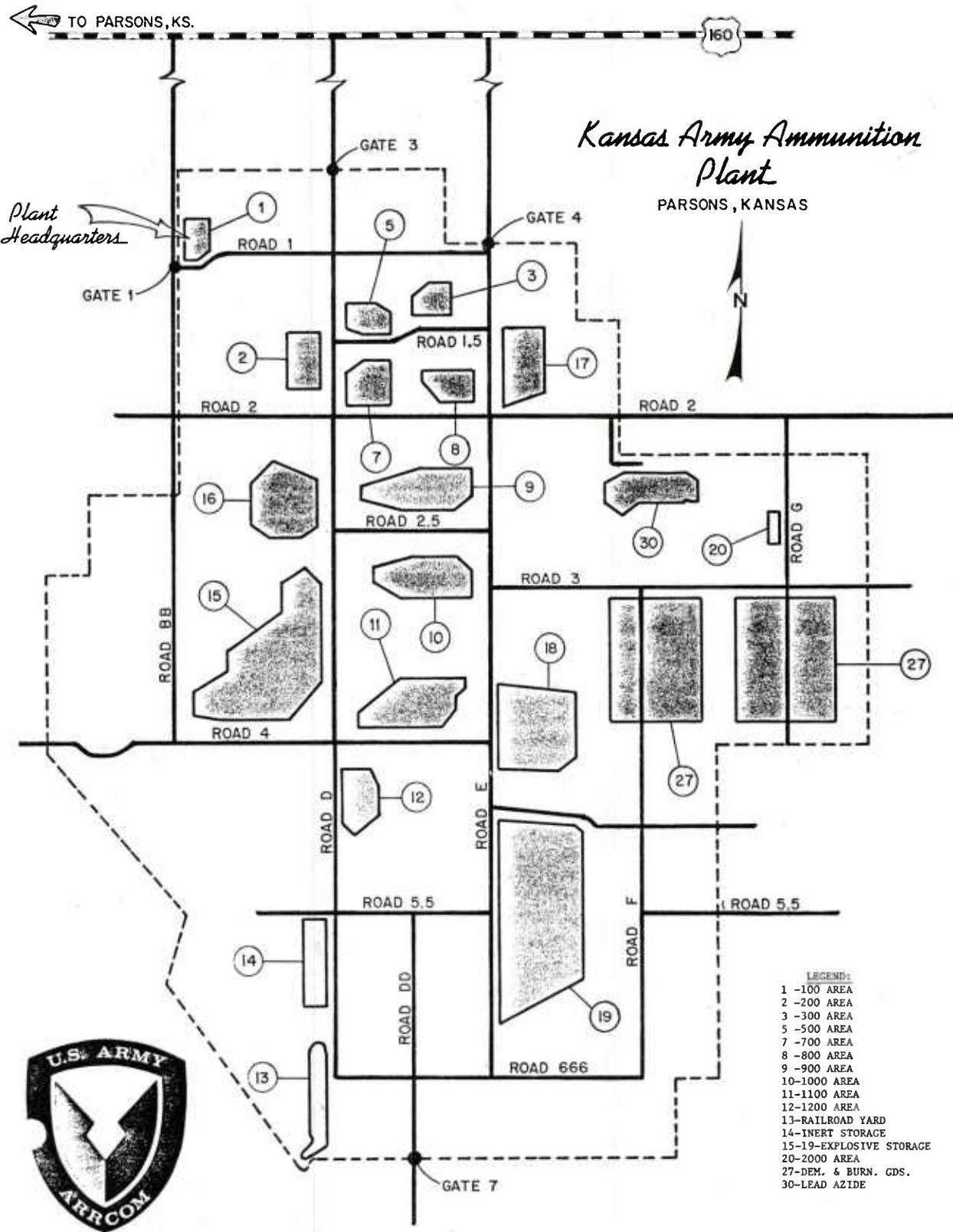


Figure 1. Map of Kansas Army Ammunition Plant (KAAP)

During mobilization, this line is scheduled to load, assemble, and pack the CBU 58B and 71. The 1200 area is in layaway status at this time but has been used to produce ammonium nitrate and for cartridge rework operations. The 1400 area is in partial layaway status at this time. This area provides warehousing for inert components and materials used in the production operations. The 2000 area is used for reliability testing of M42 and M46 grenades in support of the 300 area production. The 2100 area contains the facilities for the production of potable water. The 2200 area contains the facilities for treatment of sanitary sewage wastewater. The 3000 area is in layaway status at this time but is scheduled to produce dextrinated and RD-1333 lead azide during mobilization.

Some facilities are not located within the above described areas. These buildings carry numbers less than 100. Buildings referred to in this report include: Building 52 - Fire Station; Building 53 - Receiving and Inspection; Building 57 - Physical Test; Building 58 - Gage and Chemical Laboratories; Building 60 - Yardmaster's Office; and Building 80 - Dunnage Shop.

MOTOR HISTORY

As KAAP production schedules have varied during the past 40 years, so have the numbers, sizes, types, and applications of electric motors. Following World War II, nearly all motors were laid away. These motors were then reactivated to support production during the Korean Conflict. Some motors were added at that time. Again, nearly all motors were laid away following cessation of the Korean Conflict. During the period of 1957 to 1966 very few motors were active at KAAP. In support of production for the Southeast Asia situation, nearly all motors were reactivated. Modernization and expansion projects resulted in the addition of a large number of motors to the KAAP inventory, especially in the 900, 1000, 1100, and 3000 areas. Conversion in 1976 of the 300 area for production of the 155-mm, M483 projectile added many motors to the KAAP inventory. Current construction, modernization, and expansion projects will impact similarly.

One alternative to motor replacement that has been employed at KAAP is rewinding problem motors. Several

hundred motors have been rewound during the past 15 years alone. Many were rewound prior to that period as well. This contributed to the current situation where installed motors range in age from new to 40 years.

MOTOR PROCUREMENT PRACTICE

The current practice for procuring electric motors at KAAP is as follows. An individual budget responsible manager notes that a motor is required. A purchase requisition is then prepared detailing the exact specifications for the replacement or newly-required motor. During normal processing, the purchase requisition is reviewed by an electrical engineer in the Project and Facilities Engineering Division of Day & Zimmermann, Inc. (D&Z) for suitability for the application. At this point, an alternative motor may be recommended for any one of several reasons. The purchase requisition is then processed by the Purchasing Department of D&Z and motor suppliers are contacted.

The additional screening by the electrical engineer is a requirement started in 1979 to improve motor selection. Factors such as energy efficiency, power factor, service factor rating, and design improvements can be overlooked quite easily by budget responsible managers who infrequently procure electric motors and who, in some cases, have little technical expertise in motor selection. This step also can result in a recommendation that the motor in question be rewound in-house rather than replaced.

KAAP ELECTRICAL SYSTEM

Electricity for KAAP is purchased from the Kansas Gas and Electric Company. The main substation is served by three-phase, 60-cycle, 66-kilovolt primary power. The electricity is transmitted throughout the plant via 7,200/12,470 volt, three-phase, grounded "Y" connections.

The following services are provided at various locations with most major areas being served by several types: 120 volt, single phase; 120/208 volt, three-phase;

120/240 volt, single phase; 240/480 volt, three-phase;
277/480 volt, three-phase; and 480 volt, three-phase.

A limiting factor, in some instances, can be service type available when replacement motors are being selected. Major changes in service types are not normally economically feasible just to permit operation of certain types of motors. This should not be totally discounted, so this will be given consideration for future multiple motor changes.

ELECTRIC MOTOR EFFICIENCY IMPROVEMENT ALTERNATIVES

There is no single, simple solution to reducing electric motor energy consumption and cost. The total cost of electrical service can include usage (kilowatt-hour) charges, demand (kilowatt) charges, and power factor penalty charges. No single method is the best solution for reducing these expenses and energy waste. Improved motor energy consumption may be achieved by use of more efficient motors, use of energy efficiency improvement devices such as power factor controllers, use of higher speed motors in some instances, use of motors with lower horsepower ratings, use of motors designed specifically for the application, and use of more efficient driven equipment.

Four of the six alternatives above require replacing the existing motor with another having superior characteristics. This, then, requires that the electricity savings amortize the cost of purchasing and installing the replacement motor within a reasonable time period. One alternative requires installation of power factor improvement equipment for the existing motor. This, too, requires that the electricity savings amortize the purchase and installation costs within a reasonable time period. The remaining alternative involves replacement or maintenance of the driven equipment such that the motor load is reduced. Satisfactory amortization is a necessity.

To improve motor efficiency by installation of a different motor is normally quite simple. Determining the actual efficiency gain in advance is not. Design efficiencies of electric motors vary with motor type and size and have changed through the years as electricity and motor hardware costs have changed. Very few manufacturers list efficiency data in their sales catalogs. Those including this data do so only for full load situations.

Thus, it is difficult to compare motor efficiencies without actual operation data. To improve motor efficiency manufacturers may use more iron and copper in the motor, use thinner but more expensive insulation, require closer tolerances, and/or improve workmanship. High efficiency motors are designed to minimize internal losses for applications requiring the rated design load, or close to it, for most of the duty cycle. When motor load is reduced, the electromagnetic effects within the motor don't reduce correspondingly and the internal losses are proportionally higher. Therefore, low load efficiency is still poor.

Discussion of replacing motors at KAAP having low efficiencies with more efficient motors is included starting on page 14. The principal deterrent to this alternative is expected annual electricity savings. Another problem is determining the actual efficiency improvement to be expected. This is compounded by the wide range of sizes, motor types, ages, applications, and hours of operation. Another complication involves explosion-proof motors which are the dominant type at KAAP. No manufacturers could be found that offered both standard and high efficiency explosion-proof motors which would permit direct comparison of the rated efficiencies and the corresponding purchase cost increase. One manufacturer maintains that its motor line is designed to be more efficient than the standard motor lines available from other sources; but since the other manufacturers tend to not provide efficiency data, direct comparison was not possible.

To improve motor efficiency by installation of electrical devices such as capacitors is quite simple in theory but determining the actual energy and cost savings is not. Power factor improvement is the goal of this alternative. Power factor is the ratio of electrical power used by a motor to perform useful work to the total power drawn from the utility line. Capacitors, for example, supply reactive power to inductive equipment (motors) to reduce the need to draw this power directly from the utility line. This raises the power factor, reduces the current, and the kilovolt-ampere demand decreases somewhat. Capacitors help to reduce electrical load through reduction of the motor heat load by lowering the current. Also, as current decreases, distribution system losses become smaller and plant distribution voltage drops decrease.

Power factor controllers are designed to improve power factor by sensing the load on the motor and modifying the applied voltage so that the motor draws nearly full load

current at full load power factor, but at a reduced voltage. Core losses and copper losses are reduced while full load motor speed remains nearly constant. The availability of power factor controllers for use with three phase motors has been a limiting factor in application at KAAP. This is a relatively recent technological development so extensive field data is not available. Manufacturers developing three-phase controllers found that their early designs tended to create serious instability problems in electric motors causing them to vibrate violently. These situations are not conducive to use in explosive production operations. Controller cost has been another factor limiting application as a 10 horsepower, three-phase controller, for instance, costs between \$400 and \$850.

Motor efficiency improvement through application of capacitors and power factor controllers is not a prime alternative for several reasons. The principal reason is that there is no direct charge in the electricity billing at KAAP for low power factor. Savings would be limited to the minor motor efficiency improvement that could be achieved and reduction of some indirect costs, such as electrical hardware requirements, through the freeing of some kilovolt-ampere capacity for use by added equipment. However, specification of power factor improvement devices on replacement or newly-required large motors may be justified and thorough investigation is recommended for future motor changes. Many motors, such as those on portable shop equipment, do not permit simple power factor improvement. Low power factor is frequently due to the nature of the applied load causing light loading during much of the period of operation. This is best improved through installation of power factor controllers but the electricity cost savings must allow amortization of the device purchase and installation cost within a reasonable time period.

To improve motor efficiency by increasing motor speed is not a major opportunity at KAAP. Most motors have been selected to operate at the correct or best speed for the application. Most motors of each rating category operate at or near 1750 revolutions per minute with few motors operating at far lower or higher speeds unless required by the application. Efficiency improvement based on motor speed increases alone should range from one to three percent based on motor size and type. This small increase is generally not sufficient to amortize the necessary investment. However, when added to the specifications for replacement or newly-required motors some additional justification is possible for thorough investigation of

this alternative.

To improve motor efficiency through the use of motors having lower horsepower ratings is possible at KAAP. Some motors may have been oversized for their application. This is not a major problem, though, so few motor locations provide economic justification for replacement. Care in specifying routine replacement motors, in recent years at least, has contributed to the limited utility of this alternative. Most motors currently active were specified for the function they are currently serving, therefore, only minor efficiency improvement for this type of change is probable.

To improve motor efficiency through application of motors specifically designed for the various applications is a minor alternative for energy reduction at KAAP as most motors have been selected for their current applications on that basis. Some minor improvement in general purpose and support area motors might be realized but significant energy and cost savings are not probable. Replacement with higher efficiency motors of the same size and type would produce greater savings at about the same expense.

To improve motor efficiency by modifying the driven equipment in some way to reduce the actual power requirement is quite complex. Each motor installation would be different from any other although repetitive production operations with identical motors could be similar. Load reduction through improved maintenance of the driven equipment might be achieved in some cases but determination of actual savings and increased operating expense would be very difficult. Load reduction through replacement of faulty driven equipment is another possibility but opportunities for such changes were not observed during the data gathering phase of this study.

KAAP MOTOR INFORMATION

To fully assess the utility of a specific motor, many factors must be considered. For this study the following motor data were accumulated: location, function, horsepower, nameplate voltage(s), nameplate amperage(s), speed, phase type, frame size, motor type, metered amperage, annual hours of operation, and approximate annual cost of electricity to operate each motor. This data was used to determine the technical and economical potential

for motor replacement or other actions which would result in reduced electrical demand. The information presented in this report is sufficiently accurate to define the magnitude of effort required to substantially reduce electrical usage and to identify the motors that can be economically modified or replaced.

Listings of the active motors at KAAP in order by building number (location) and then by horsepower rating within each building are included as Appendixes A and B. Listings of the inactive motors at KAAP in the same order are included as Appendixes C and D. Computer limitations necessitated putting only about one-half of the total motor data on a single computer file. Therefore, motors located in the 100, 200, 300, 500, 700, 800, 900 and General Areas are listed in Appendixes A and C while those in the 1000, 1100, 1200, 1400, 2000, 2100, 2200, and 3000 Areas are listed in Appendixes B and D.

All motor information, except hours of operation and electricity cost, was recorded by the electricians in the field. Metered amperages were determined by use of clamp-on ammeters. The recorded annual hours of operation for each motor was provided by plant personnel familiar with the normal duty cycle of each motor. As these values are estimates, there may be some sizeable discrepancies. Still, the apparent magnitude should be sufficiently close to actual to have an adequate confidence level in the results.

The annual cost of electricity to operate the motors was based on an average charge of four cents per kilowatt-hour. Metered amperage times line volts times annual hours times four cents per kilowatt-hour was used for calculating annual electricity costs for single phase motors. The factor 1.732 was used for three-phase motor calculations. Annual cost would increase proportionately if any of the above factors were to increase. The costs listed are based on constant loading such that the metered amperage would be required during all hours of operation. This, of course, is not completely accurate for most motors. But, the resulting costs can be used to indicate the maximum annual cost that could be expected so long as the electricity charge and hours of operation remain unchanged.

Additional motor information that could have been listed includes: motor manufacturer, year of manufacture, apparent power factor and whether or not the motor is of the explosion-proof type. This data can have a bearing on

selection of replacement motors and related costs.

An inventory of motors by manufacturer would be interesting to review but would be of minor importance in developing a motor replacement plan. Some motor manufacturers produce motors that are not identical to those having the same catalog description that are produced by other manufacturers. This problem will need to be handled on an individual motor basis.

An inventory by year of manufacture would also be interesting to review but would not be of great value in developing a motor replacement plan. Due to the cyclical nature of production at KAAP it is possible to have a 30 year old motor with fewer total hours of operation than a five year old motor. This is especially true when the newer motor is serving a function requiring near-continuous operation while the older motor has intermittent usage. The large number of motors that have been rewound add to the confusion in determining which motors have had the most extensive life.

Discussion of the relatively minor opportunity for energy reduction through application of power factor improvement devices was included under Electric Motor Efficiency Improvement Alternatives starting on page 9.

A record of which motors require explosion-proof construction was not maintained. Nearly all motors in production buildings at KAAP are required to be of this type. For replacement planning, this must be considered, but little effort is required to determine whether or not the relatively few motors for which replacement is recommended are of this type.

Table 1 on page 19 summarizes the range of electricity cost for operating motors at KAAP and provides the number of motors within each given range of annual cost. Slightly more than one-half of the active motors have a cost of \$50 or less. Fewer than ten percent have costs in excess of \$300 while only 3.2 percent have costs in excess of \$1,000. Table 2 on page 22 summarizes the range of annual hours of operation for active motors and provides the number of motors within each given range of hours. Nearly one-half of the motors operate fewer than 500 hours annually. The above facts are directly responsible for the fact that few motors at KAAP can be economically modified or replaced with more efficient motors based on current electricity costs.

The prevalence of low annual operating costs is due somewhat to the large number of fractional horsepower motors. Of the active motors, 35.6 percent are rated at one-third or one-half horsepower, 50.9 percent are rated at one horsepower or less, and only 11.2 percent are rated greater than five horsepower. These percentages would not change significantly if all inactive motors were reactivated. Table 3 on page 21 provides the number of active, inactive, and total motors of each horsepower rating and the corresponding percentage of the total each rating represents.

Explosion-proof motors are predominate in the production areas. Since more than half of the currently active motors are located in production areas it is evident that high efficiency explosion-proof motors are important to energy reduction potential at KAAP. If all inactive motors were to be reactivated, four out of five motors would be located in production areas. Table 4 on page 23 provides the number of active, inactive, and total motors located in each area and the corresponding percentage of the total each represents.

ECONOMIC EVALUATION OF MOTOR CHANGES

The methods of increasing motor efficiency were discussed above under Electric Motor Efficiency Improvement Alternatives. The largest efficiency improvement should be obtained by installing a replacement motor that has been designed to operate more efficiently than that presently installed. Speed changes, power factor improvement, switching to a smaller horsepower motor, changing to motor design, and modifying the driven equipment were alternatives considered but which, in the normal case, provide a smaller efficiency improvement than does motor replacement while the cost of change would be similar. Therefore, to simplify identification of motors which may allow economical energy reduction, the selection criteria used below is based on replacing the existing standard motors with higher efficiency replacement motors of the same horsepower, speed, frame size, and type.

The differential purchase cost between standard and high efficiency electric motors is dependent on the motor rating, frame size, type, electric service used (120 volt, single phase versus 240/480 volt, three-phase), and motor

speed. The differential purchase cost, for example, tends to increase as horsepower rating increases. The differential efficiency improvement achievable also varies somewhat with motor type and rating. For example, the efficiency gain tends to decrease as horsepower rating increases.

In order to establish the magnitude of potential for replacing motors, a single type has been used for screening purposes. The type selected is totally-enclosed, fan-cooled, which is representative of many motors at KAAP. Table 5 provides a summary of the annual present electricity costs for each motor rating that would be required so that the energy saved by improving the motor efficiency by the percentage listed would result in adequate cost savings to amortize the purchase and installation costs within a reasonable period of time.

Three basic replacement alternatives were considered. First, replacement when the present motor fails. The differential cost in this case is limited to purchase cost of the motor as the installation cost would be required anyway. Second, replacement, at this time, of a low efficiency motor that is operating satisfactorily otherwise. In this case the differential cost is motor purchase cost plus installation cost. A simple economic breakeven payback period of three years was chosen as the selection base for these two alternatives to be representative of the criteria used when production funds are used. Third, replacement through the Energy Conservation and Management (ECAM) program. This program is commonly used to procure, install, or modify facilities and/or equipment when energy savings are adequate to meet the program criteria. A discounted benefit to cost ratio of one or more is required and a ratio of mega BTU's saved annually to thousands of dollars invested equal to or greater than 13 is required at this time for the plan of action to be accepted. A four year planning cycle is the disadvantage to using ECAM funds for projects of the type being considered.

In Table 5, cost differential is based on average manufacturer prices for each motor rating. Efficiency improvement is based on averaging manufacturer information. Energy savings percentages were calculated by use of the equation: $S = 100/EA - 100/EB$ where S = energy savings, EA = standard motor efficiency, and EB = replacement motor efficiency. The quantity EB - EA is equal to the efficiency improvement listed. For the case where a currently installed motor is to be replaced prior to failure, gross installation costs have been included. This

cost was set at \$100 minimum for motors up to three-quarter horsepower, \$200 minimum for motors between one and five horsepower, and \$800 minimum for motors of seven and one-half and ten horsepower. Installation costs for motors larger than 10 horsepower must be evaluated separately as few locations and applications are similar; therefore, no figures for motors over 10 horsepower are provided in Table 5 for alternatives two and three. However, the findings for the smaller motors should also apply.

A comparison of the minimum annual costs listed in Table 5 to the costs listed in Appendixes E and F, which list the motors by increasing annual cost, finds that few motors qualify for economic replacement. For the first alternative, a total of 31 motors appear to qualify. All but eight of those motors are of the explosion-proof type so actual efficiency improvement and cost savings can be questioned. For the second alternative, no motors qualify. For the third alternative, 17 motors appear to qualify but all are of the explosion-proof type. A summary of the motors that qualify, sorted by horsepower rating, is provided as Table 6. Table 7 lists the recommended replacements for the 31 motors qualifying for replacement using Alternative 1 of which 17 also qualify using Alternative 3. As Baldor was the only manufacturer found claiming to produce energy efficient explosion-proof motors, all motors recommended show the Baldor data including full load efficiency. Follow-up action has been initiated by KAAP staff to further evaluate these motors prior to seeking funds to procure replacement motors.

MOTOR DEFICIENCIES

Among the motor data included in Appendixes A and B are values for motor current to be expected at full load and the current metered during normal operation. By comparing these values for each motor it is possible to identify those motor installations where the actual load is greater than full load according to the nameplate. In some instances this excessive loading is due to the motor being operated at a voltage slightly different than that given on the nameplate. Another reason for apparent excessive loading is that most motors are subject to a service factor rating which permits overloads of 15 to 35 percent depending on motor rating and type. Most explosion-proof motors have a service factor of 1.0 but some are rated at

1.15.

Of the 854 active motors, a total of 34 appear to be loaded excessively based on the data in Appendixes A and B when the above qualifications are considered. Only 11 of those 34 have an annual electricity cost in excess of \$50. Seven of those motors are connected to air compressor units which are normally designed to operate at near full load during the duty cycle so minor overloading is not uncommon. Follow-up action has been initiated by KAAP staff to further evaluate the remaining motors prior to seeking funds to procure replacement motors. In-house rewinding will be considered where applicable.

STANDARDIZATION OF MOTORS

One method of reducing overall motor cost is to minimize the number of motor types and sizes required. A major benefit is that fast replacement of problem motors would generally be possible by having inactive motors of the same description in-plant. This would be especially helpful for motors that normally have a long delivery period. Another benefit is that manufacturers can offer price discounts when a sizeable number of identical motors are being purchased. Manufacturers can also construct motors with improved operational characteristics if the purchaser has a need for a sizeable number of identical motors and is willing to accept the longer delivery period and higher purchase price. Maintenance performed by plant personnel would be simplified to some degree due to a smaller number of motor types.

The principal limitation to standardizing motors at KAAP is the wide variety of applications of motors due to the diverse nature of ammunition load, assemble, and pack operations. The information on motor functions provided in Appendixes A, B, C, and D indicated that there are few common types of motor applications. Motors on production equipment have normally been selected specifically for the function being served so replacement with a motor of different rating, speed, frame size, or phase type is not normally a wise decision and, in some cases, cannot be done. The requirement for explosion-proof construction for about one-half of the active motors reduces the potential for standardization greatly. Potential for standardization is minimal for motors rated greater than five horsepower as most of those motors have special applications and there

are relatively few motors of each horsepower rating.

Actual energy cost savings and maintenance savings must provide adequate economic advantage to justify motor replacement for standardization purposes. This economic payback is not possible for most motor applications due to the small percentage of efficiency improvement that would be achieved and the predominance of annual electricity cost below \$200 (72.8 percent). Therefore, overall standardization of motors at KAAP is not recommended. Current government buying regulations and practices do not lend themselves to standardization, particularly where the equipment is procured and installed under Corps of Engineers contracts. Current standards are that "low bid" takes precedence over energy efficiency.

CONCLUSIONS

1. Current electric motor usage, repair and replacement practices at Kansas AAP are cost effective and energy efficient over the life-cycle of the equipment.
2. Reduction of energy consumption by replacement of motors with premium priced, higher efficiency motors was examined. Only 31 out of 854 active motors surveyed qualified for economic replacement when the present motor fails. No motors qualified for immediate replacement since the expected reduction in operating costs could not amortize the cost of a new motor in any reasonable length of time.
3. Standardization of motors and efficiency improvement through application of capacitors and power factor controllers were considered and determined not to be cost effective.
4. Care in specifying replacement motors over the years has resulted in very few motors which are oversized for their application. Corrective action will be taken in these few instances.

Table 1. Summary of annual electricity costs^a

<u>Annual electricity cost (\$)</u>	<u>Number of motors</u>	<u>Percentage of total</u>
0-50	438	51.2
51-100	92	10.8
101-200	92	10.8
201-300	53	6.2
301-400	18	2.1
401-500	9	1.1
501-1000	24	2.8
1001-2000	9	1.1
2000 and up	18	2.1
Undetermined ^b	<u>101</u>	<u>11.8</u>
TOTAL	854	100.0

a - Based on 4¢ per kilowatt-hour electricity charge.

b - Electricity cost is undetermined due to missing motor data. Examples include sump pump motors and exhaust fans where nameplates were inaccessible.

Table 2. Summary of annual hours of operation

<u>Number of hours</u>	<u>Number of motors</u>	<u>Percentage of total</u>
0-99	15	1.8
100-500	371	43.4
501-1000	177	20.7
1001-2000	180	21.1
2000 and up	91	10.7
Undetermined*	<u>20</u>	<u>2.3</u>
TOTAL	854	100.0

*Annual hours were not determined as most of these motors are used to support a short term engineering project. Therefore, these are not eligible for replacement. The usage of the remaining motors is very limited.

Table 3. Summary of active, inactive, and total motors sorted by horse-power rating

Horsepower rating	Number of active motors	Percentage of total	Number of inactive motors	Percentage of total	Number of total motors	Percentage of total
1/3	158	18.5	102	9.0	260	13.1
1/2	146	17.1	183	16.2	329	16.6
3/4	66	7.7	117	10.3	183	9.2
1	65	7.6	166	14.6	231	11.6
1-1/2	32	3.8	79	7.0	111	5.6
2	56	6.6	60	5.3	116	5.8
2-1/2	0	0.0	2	0.2	2	0.1
3	40	4.7	72	6.4	112	5.6
4	2	0.2	0	0.0	2	0.1
5	94	11.0	130	11.5	224	11.3
7-1/2	36	4.2	50	4.4	86	4.3
10	24	2.8	31	2.7	55	2.8
15	16	1.8	28	2.5	44	2.2
20	3	0.4	9	0.8	12	0.6
25	3	0.4	20	1.8	23	1.2
30	0	0.0	11	1.0	11	0.6
40	0	0.0	4	0.4	4	0.2
50	2	0.2	6	0.5	8	0.4
75	3	0.4	2	0.2	5	0.3
100	4	0.5	7	0.6	11	0.6
125	1	0.1	7	0.6	8	0.4
150	1	0.1	0	0.0	1	0.0
200	2	0.2	1	0.1	3	0.3

Table 3. (cont)

Horsepower rating	Number of active motors	Percentage of total	Number of inactive motors	Percentage of total	Number of total motors	Percentage of total
250	0	0.0	1	0.1	1	0.0
400	1	0.1	0	0.0	1	0.0
Undetermined*	<u>99</u>	<u>11.6</u>	<u>43</u>	<u>3.8</u>	<u>142</u>	<u>7.1</u>
TOTAL	854	100.0	1,131	100.0	1,985	100.0

* Horsepower rating of these motors was not available. Examples include sump pump motors and exhaust fans where nameplates were inaccessible.

Table 4. Summary of active, inactive, and total motors sorted by location

<u>Area</u>	<u>Number of active motors</u>	<u>Percentage of total</u>	<u>Number of inactive motors</u>	<u>Percentage of total</u>	<u>Number of total motors</u>	<u>Percentage of total</u>
General	39	4.6	0	0.0	39	3.0
100	57	6.7	4	0.4	61	2.1
200	220	25.8	9	0.8	229	11.5
300	253	29.6	7	0.6	260	13.1
500	2	0.2	51	4.5	53	2.7
700	107	12.5	1	0.1	108	5.4
800	5	0.6	60	5.3	65	3.3
900	36	4.2	192	16.9	228	11.5
1000	14	1.7	309	27.3	323	16.2
1100	30	3.5	251	22.2	281	14.2
1200	2	0.2	19	1.7	21	1.1
1400	37	4.3	4	0.4	41	2.0
2000	2	0.2	0	0.0	2	0.1
2100	18	2.1	2	0.2	20	1.0
2200	21	2.5	1	0.1	22	1.1
3000	<u>11</u>	<u>1.3</u>	<u>221</u>	<u>19.5</u>	<u>232</u>	<u>11.7</u>
TOTAL	854	100.0	1,131	100.0	1,985	100.0

Table 5. Summary of current annual electricity cost required for economic payback of motor changes*

Horsepower rating	Efficiency improvement, percent	Effective energy savings, percent	Alternate #1 differential purchase cost			Alternate #2 differential purchase cost plus installation \$			Alternate #3 total purchase cost plus installation \$			Annual electricity cost required \$	Annual electricity cost required \$	Annual electricity cost required \$
			\$			\$			\$					
1/3	8	13.0	20			120			51			308	110	
1/2	8	13.0	40			140			103			359	145	
3/4	8	13.0	55			155			141			397	165	
1	8	13.0	70			270			179			692	252	
1-1/2	5	7.7	80			280			423			346	1,212	447
2	5	7.7	85			285			442			368	1,234	468
3	4	5.5	85			285			478			515	1,727	708
5	4	5.5	100			300			517			606	1,818	766
7-1/2	3	3.9	105			905			1,188			897	7,735	2,481
10	3	3.9	130			930			1,268			1,111	7,949	2,648
15	3	3.8	120			-			1,052			-	-	-
20	3	3.8	125			-			1,096			-	-	-
25	3	3.6	145			-			1,343			-	-	-
30	3	3.6	155			-			1,435			-	-	-
40	2	2.4	235			-			3,264			-	-	-

Table 5. (cont)

Horsepower rating	Efficiency improvement percent	Effective energy savings percent	Alternate #1 differential purchase cost \$	Alternate #2 differential purchase cost plus installation \$	Alternate #3 total purchase cost plus installation \$	Alternate #1 annual electricity cost required \$	Alternate #2 annual electricity cost required \$	Alternate #3 annual electricity cost required \$
50	2	2.4	265	-	-	3,661	-	-
75	2	2.4	590	-	-	8,194	-	-
100	2	2.4	645	-	-	8,958	-	-
125	2	2.3	760	-	-	11,014	-	-
150	1	1.1	775	-	-	23,485	-	-
200	1	1.1	990	-	-	30,000	-	-

* Based on 4¢ per kilowatt-hour electricity charge.

Table 6. Summary of motors qualifying for economic replacement

Horsepower rating	Alternate #1		Alternate #2		Alternate #3	
	Number of standard motors	Number of explosion-proof motors	Number of standard motors	Number of explosion-proof motors	Number of standard motors	Number of explosion-proof motors
1/3	5	4	0	0	0	2
1/2	0	5	0	0	0	4
3/4	0	1	0	0	0	1
1	0	8	0	0	0	7
1-1/2	0	0	0	0	0	0
2	0	1	0	0	0	1
3	0	1	0	0	0	1
5	0	1	0	0	0	1
7-1/2	0	0	0	0	0	0
10	0	1	0	0	0	0
15	3	0	0	0	0	0
20 and up	0	1	0	0	0	0
TOTAL	8	23	0	0	0	17

Table 7. Motor replacement plan

<u>Location</u>	<u>Function</u>	<u>Explosion-proof yes/no</u>	<u>Annual^a electric cost, \$</u>	<u>Alternate(s)^b qualifying</u>	<u>Line volts</u>	<u>Horsepower rating</u>	<u>RPM</u>	<u>Phase</u>	<u>Full load eff., %</u>	<u>Frame size</u>
58	Burner Motor	No	70	1	115	1/3	1725	1	56	56C
112	Boiler Chemical Mixer	No	63	1	115	1/3	1725	1	56	48
112	Boiler Fuel Oil Feed	No	69	1	208	1/3	3450	3	65	48
315	#7 Connolly Feed Out	Yes	57	1	460	1/3	1725	3	74	56C
315	Shell Walker	Yes	166	1, 3	208	1/2	1725	3	74	56C
315	Shell Walker	Yes	178	1, 3	208	1/2	1725	3	74	56C
315	West End Crossover	Yes	204	1, 3	208	1/2	1725	3	74	56C
315	Banding Conveyor Motor	Yes	197	1	208	1	1725	3	75	56
315	Hydraulic Pump	Yes	1,658	1	208	10	1140	3	85	256T
324	Lead Cup #2 Conveyor	Yes	62	1	208	1/3	1725	3	74	56
701	East Air Compressor	Yes	254	1, 3	115	1/2	1725	1	65	56
703	Air Compressor	Yes	260	1, 3	208	1	1140	3	77	145T
705	Air Handier	Yes	911	1, 3	460	3	1725	3	82	182T
705	Air Compressor	Yes	975	1, 3	208	5	1725	3	85	184T
708	Air Compressor	Yes	275	1, 3	208	1	1740	3	80	182C
724	Water Feed Pump #1	No	1,195	1	208	15	3525	3	84	254T
724	Water Feed Pump #2	No	1,266	1	208	15	3525	3	84	254T
724	Water Feed Pump #3	No	1,259	1	208	15	3525	3	84	254T
732	Condenser Fan	Yes	116	1, 3	208	1/3	1725	3	74	56

Table 7. (Cont)

<u>Location</u>	<u>Function</u>	<u>Explosion-proof yes/no</u>	<u>Annual^a electric cost, \$</u>	<u>Alternate(s)^b qualifying</u>	<u>Line volts</u>	<u>Horsepower rating</u>	<u>RPM</u>	<u>Phase</u>	<u>Full load eff., %</u>	<u>Frame size</u>
733	Air Compressor	Yes	157	1, 3	115	1/3	1725	1	56	56
736	Air Compressor	Yes	670	1, 3	208	1	1740	3	80	182 ^c
739	Air Compressor	Yes	485	1, 3	208	2	1725	3	80	145T
740	Exhaust Fan	Yes	117	1	115	1/2	1725	1	65	56
741	Air Compressor	Yes	170	1, 3	115	3/4	1725	1	66	56
741	Condenser Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	296	1, 3	208	1	1725	3	75	56
741	Condensor Fan	Yes	308	1, 3	208	1	1725	3	75	56
902	Chemical Feed Pump	No	69	1	115	1/3	1725	1	56	56
904	Air Compressor	Yes	1,399	1	460	25	1160	3	91	324T ^c
2106	Burner Motor	No	83	1	115	1/3	1725	1	56	56C

a. Based on 4c per kilowatt-hour electricity charge.

b. Based on data in Table 5.

c. No exact, energy efficient replacement was found. The motor recommended will require frame alteration.

APPENDIX A

ACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION -
BUILDING NUMBERS BELOW 999

DAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357

ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
012	BENCH GRINDER	.33	1000	1	110	115	4.6	---	K	12747	115	4.6	3.6	100	2	
052	BOILER OIL PUMP	.33	1725	1	115	208	230	6.0	3.0	56C	115	6.0	---	1500	---	
012	OVERHEAD HEATER	.75	1725	1	115	230	---	10.4	5.2	73A	115	10.4	11.0	500	25	
052	CONDENSATE PUMP	.75	3450	3	208	220	440	2.5	1.3	G56	---	208	2.5	1.2	200	
052	AIR COMPRESSOR	3.00	1725	3	208	416	---	8.4	4.2	PFV3	---	93321	208	8.4	7.5	
053	FUEL OIL BURNER	.33	1725	1	115	230	---	6.0	3.0	VL	72792	115	6.0	2.9	500	
053	TENSILE TEST MACHINE	.33	1725	1	115	230	---	6.4	3.2	G56C	---	93550	115	6.4	2.6	
053	OVERHEAD HEATER	.50	1075	1	115	230	---	5.8	2.9	K56	CC	None	115	5.8	100	
053	OVERHEAD HEATER	.50	1075	1	115	230	---	5.8	2.9	K56	CC	275395	115	5.8	100	
053	BLOWER MOTOR	.50	1725	1	115	230	---	7.0	3.5	63A	KC	41177	115	7.0	6.6	
053	CONDENSATE PUMP	.50	1735	3	208	416	---	1.6	.8	---	45511	208	1.6	0.6	200	
053	TENSILE TEST MACHINE	.75	1725	3	230	460	---	3.0	1.5	56C 513M	---	94551	208	3.0	2.1	
053	AIR HANDLER MOTOR	2.0	1735	3	200	---	6.8	---	145T	TDR-BE	96368	208	6.6	---	2016	191
057	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	115	10.0	8.6	100	4	
057	CONDENSATE PUMP	.50	1725	3	208	416	---	1.6	.8	---	---	208	1.6	1.0	200	
057	SAW MOTOR	5.00	1730	3	230	460	---	13.2	6.6	184T	TFL	98594	208	13.2	5.8	
057	PUMP MOTOR	---	---	---	---	---	---	---	---	---	---	---	2.2	100	9	
058	BLOWER MOTOR	.33	1725	3	220	---	1.1	---	45A	K	79478	208	1.2	---	300	---
058	BURNER MOTOR	.33	1725	1	115	230	---	6.0	3.0	566	---	71449	115	6.0	7.5	
058	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	None	115	10.0	6.5	100	
058	BLOWER MOTOR	.33	1725	3	220	---	1.1	---	45A	K	79481	208	1.2	---	300	---
058	BLOWER MOTOR	.33	1725	1	230	---	3.3	---	58562	FHT	None	230	3.3	---	300	---
058	BLOWER MOTOR	.33	1740	3	220	---	1.1	---	45A	K	79476	208	1.2	---	300	---
058	AIR HANDLER MOTOR	.33	3450	3	230	460	---	1.8	.9	48	---	71449	115	6.0	7.5	
058	CONDENSER FAN MOTOR	.50	1075	1	115	230	---	5.8	2.9	K56	CC	None	115	10.0	6.5	
058	BLOWER MOTOR	.50	1750	-	---	---	---	---	A	E12	02389	---	5.8	---	300	---
058	AIR HANDLER MOTOR	.75	1725	1	115	230	---	10.4	5.2	H56	RK-3	85887	115	10.4	4.1	
058	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	56	---	95133	208	2.6	1.2	
058	BLOWER MOTOR	1.00	1740	3	220	440	---	3.8	1.9	---	---	61876	208	4.0	---	
058	AIR HANDLER MOTOR	1.50	3450	3	220	440	---	4.4	2.2	56	---	None	208	4.7	1.9	
058	AIR HANDLER MOTOR	2.00	1735	3	200	---	6.8	---	145T	TDR-BE	None	208	6.6	6.3	1500	
058	AIR COMPRESSOR	3.00	1750	3	208	---	8.9	---	225	ES	05339	208	8.9	8.0	1000	
058	AIR HANDLER COMPRESS	---	---	---	---	---	---	---	---	---	78268	208	---	14.4	1000	
060	SUMP PUMP	---	---	---	---	---	---	---	---	---	---	---	8.7	100	---	
080	AIR COMPRESSOR	1.50	1500	3	208	416	---	4.7	2.4	59-5	SC	40999	208	4.7	4.7	
080	RADIAL ARM SAW	3.00	3425	3	220	440	---	14.7	6B6	---	None	14.7	12.0	1000	173	
080	RADIAL ARM SAW	7.50	3425	3	208	220	440	20.0	10.0	712	---	66090	208	20.0	1000	
102	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	---	66090	208	16.7	1000	
102	Duplicator	.33	1725	1	115	---	5.7	---	---	---	---	96536	115	5.7	5.5	
102	PAPER PUNCH	.33	1725	1	115	---	6.2	---	F48	SPS	089852	115	6.2	6.0	100	
102	Duplicator	.50	1725	1	115	---	8.4	---	56	---	96536	115	8.4	8.0	1200	
102	EXHAUST FAN	.75	1750	1	115	230	---	10.4	5.2	C66	---	70927	115	10.4	---	
102	EXHAUST FAN	.75	1750	1	115	230	---	10.4	5.2	C66	---	70974	115	10.4	---	
102	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	56	---	96567	208	2.6	1.4	
102	PAPER CUTTER	3.00	1745	3	208	---	10.4	---	1B2T	SC	092888	208	10.4	8.5	100	
102	AIR COMPRESSOR	3.00	1750	1	110	220	---	37.2	18.6	225	RA	B0155	115	35.6	22.0	
104	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	A771E	None	115	10.0	8.5	
104	CONDENSATE PUMP	.75	3450	3	208	230	460	2.8	1.3	56	---	97902	208	2.8	1.8	100
105	SUMP PUMP	.33	1750	1	110	---	10.0	---	---	---	None	115	9.6	8.0	100	
105	CONDENSATE PUMP	.75	3450	3	208	270	450	2.6	1.3	56	---	96571	208	2.6	1.2	250

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
106	SUMP PUMP	.33	1725	1	115	-----	-----	-----	-----	115	-----	8.0	100	4	
106	BENCH GRINDER	.33	3450	1	115	-----	4.2	-----	-----	115	4.2	3.0	50	1	
106	CONDENSATE PUMP	.75	3450	3	230	460	2.4	1.2	K56	208	2.7	2.5	100	3	
107	HOT WTR RETURN PUMP	.50	1750	3	208	230	460	1.8	1.7	-----	208	1.8	1.5	1000	21
107	AIR COMPRESSOR	.50	-----	1	115	230	8.6	4.3	-----	115	8.6	7.5	1000	35	
107	CHIL WATER RETURN	1.00	1725	3	208	230	460	3.4	3.2	1.6	208	3.4	3.0	1000	43
107	CONDENSATE PUMP MTR	1.00	-----	3	208	-----	4.6	-----	M56	208	4.4	4.0	500	29	
107	DUCT BLOWER MOTOR	1.00	-----	3	208	-----	4.0	-----	-----	208	4.0	4.0	2000	116	
107	COOL DISCHRG BLOWER	5.00	1735	3	200	-----	16.3	-----	-----	208	15.7	14.0	2016	407	
107	DUCT BLOWER MOTOR	5.00	-----	3	208	-----	16.2	-----	-----	208	16.2	14.0	2000	404	
107	CONDENSOR MOTOR	5.00	-----	3	208	-----	13.6	-----	-----	208	13.6	14.7	1000	211	
107	REFRIG COMPRESSOR	-----	-----	3	200	230	460	126.	144.	57.0	208	121.0	75.0	1000	2390
112	BOILER FUEL OIL PUMP	.33	1725	3	208	220	1.1	-----	-----	208	1.1	1.6	3000	43	
112	BOILER CHEM MIXER	.33	1725	1	115	-----	5.0	-----	-----	208	115	5.0	4.6	3000	
112	WATER SOFTENER EAST	.33	1725	1	115	230	6.6	3.3	-----	208	115	6.6	3.0	500	
112	WATER SOFTENER WEST	.33	1725	1	115	230	6.6	3.3	-----	208	115	6.6	3.6	500	
112	BOILER FUEL OIL FEED	.33	3450	3	208	220	460	1.5	1.4	.7	208	1.5	1.6	3000	69
112	DRYER 088518	.50	1725	3	208	220	440	1.9	1.0	-----	208	1.9	1.8	750	19
112	DRYER 088518	1.50	1730	3	208	220	440	1.2	2.1	-----	208	4.2	3.6	750	38
112	DRYER TUMBLER	2.00	1000	3	208	220	440	7.4	7.0	3.5	213	7.4	3.6	750	38
112	DRYER TUMBLER 085768	2.00	1000	3	208	220	440	7.4	7.0	3.5	213	7.4	4.0	750	43
112	DRYER TUMBLE 085770	2.00	1000	3	208	220	440	7.4	7.0	3.5	213	7.4	3.6	750	38
112	WASHING MACH 087222	3.00	1740	3	230	460	9.8	4.9	-----	182T	10.9	5.6	750	68	
112	WASHING MACH 087222	3.00	1745	3	208	220	440	6.7	6.4	3.2	184	10.9	6.7	750	73
112	WASHING MACH 085824	5.00	1650	3	208	416	14.4	7.2	-----	213	P	10857224	208	4.2	
112	WASHER 085746	5.00	1650	3	208	416	14.4	7.2	-----	213	P	1085745	208	9.2	
112	WASHER 085746	5.00	1650	3	208	416	14.4	7.2	-----	213	P	1085743	208	12.0	
112	WASHING MACH 085824	5.00	1650	3	208	416	14.4	7.2	-----	213	P	1085744	208	14.4	
112	WASHING MACH 085824	5.00	1665	3	208	416	14.4	7.2	-----	213	P	1085847	208	8.7	
112	WASHING MACH 085824	5.00	1665	3	208	416	14.4	7.2	-----	213	P	1085745	208	14.4	
112	WASHING MACH 085824	5.00	1665	3	208	416	14.4	7.2	-----	215	P	1085845	208	14.4	
112	AIR COMPRESSOR	5.00	1725	3	208	-----	16.0	-----	-----	213	P	1085943	208	12.0	
112	WASHING MACH 087222	5.00	1760	3	208	416	14.8	7.4	-----	2540	GOK	1087223	208	9.7	
112	WASHER 085746	7.50	1700	3	208	416	14.4	7.2	-----	213	P	1085742	208	21.6	
112	WASHING MACH 085746	7.50	1700	3	208	416	14.4	7.2	-----	215	P	1085745	208	14.4	
112	CONDENSATE PUMP	7.50	1745	3	208	400	23.4	11.7	-----	213T	P	1085849	208	11.4	
112	BOILER BLOWER	7.50	1750	3	220	440	19.6	9.8	-----	284	OGX	108251	208	17.0	
112	DRYER BLOWER	10.00	1735	3	208	220	440	28.8	27.2	13.6	215T	R	None	208	20.5
112	DRYER BLOWER 087222	10.00	1735	3	208	220	440	28.8	27.2	13.6	215T	R	None	208	20.8
112	DRYER BLOWER 085768	10.00	1735	3	208	220	440	21.6	10.8	-----	25642	P	1085846	208	21.6
112	CONDENSATE PUMP	7.50	1745	3	208	416	14.4	7.2	-----	215	P	1085849	208	22.5	
112	RIVET SET	-----	-----	3	200	400	23.4	11.7	-----	213T	P	1085846	208	18.0	
202	2ND N OH DOOR OPENER	.33	1750	1	115	-----	10.0	-----	-----	208	115	9.7	8.2	100	
202	W OVERHEAD DOOR OPEN	.33	1725	1	115	-----	10.0	-----	-----	208	115	10.0	8.0	100	
202	4 TH N OH DOOR OPENER	.33	1725	1	115	-----	10.0	-----	-----	208	115	10.0	8.0	100	
202	7TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	208	115	5.6	5.3	433	
202	RIVET SET	.33	1725	1	115	-----	5.6	-----	-----	208	115	5.6	5.1	50	
202	2ND N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	208	115	5.6	5.3	300	
202	4 TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	208	115	5.6	5.1	300	
202	7TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	208	115	5.6	5.3	300	
201	PAPER BALER	10.00	1745	3	230	460	26.0	13.0	-----	215TC	P	97239	208	20.0	
201	HEATER OIL MOTOR	-----	-----	3	220	440	13.6	6.8	-----	254	MLU	None	208	14.4	
186	WATER PUMP MOTOR	2.00	3450	3	208	220	440	21.2	20.0	10.0	284	MLU	None	208	20.8
186	FEED PUMP MOTOR	5.00	1750	3	208	220	440	18.4	9.2	-----	184	KC	62347	208	9.2
186	BURNER MOTOR	7.50	1750	3	208	230	-----	-----	-----	-----	-----	-----	-----	-----	
186	EXHAUST FAN	1.50	1725	1	115	-----	10.0	-----	-----	-----	-----	-----	-----	-----	
201	HEATER BALER	-----	-----	3	220	440	5.9	3.0	-----	-----	-----	-----	-----	-----	
201	HEATER OIL MOTOR	-----	-----	3	220	440	13.6	6.8	-----	254	MLU	None	208	14.4	
201	PAPER BALER	10.00	1745	3	230	460	26.0	13.0	-----	215TC	P	97239	208	20.0	
202	7TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	562	-----	27255	115	5.6	
202	RIVET SET	.33	1725	1	115	-----	5.6	-----	-----	562	S	78046	115	5.1	
202	2ND N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	562	-----	7256	115	5.6	
202	4 TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	562	-----	None	115	5.6	
202	7TH N OH DOOR OPENER	.33	1725	1	115	-----	5.6	-----	-----	562	-----	27253	115	5.3	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
202	8TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	562	---	47252	115	5.6	7.0	300	
202	DELTA DRILL PRESS	.33	1725	1	110	---	6.3	---	165	SS	79153	115	6.0	5.0	300	
202	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	NONE	115	10.0	8.5	100	
202	5TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	562	---	47251	115	5.6	6.3	300	
202	6TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	562	---	NONE	115	5.6	5.5	300	
202	DRILL PRESS	.33	1740	3	230	---	5.6	2.8	115	---	04547	208	---	1.0	200	
202	N OVERHEAD DOOR OPEN	.33	1750	1	115	230	5.6	---	---	---	NONE	115	5.6	5.7	300	
202	BENCH GRINDER	.33	3450	1	115	---	4.1	---	---	---	---	67174	115	4.1	3.9	50
202	DRILL PRESS	.50	1140	3	208	---	1.9	---	75D	K	75364	208	1.9	1.5	100	
202	DRILL PRESS	.50	1725	1	115	230	7.6	3.8	110G	K.B.	46110	115	7.6	6.1	100	
202	3RD N OH DOOR OPENER	.50	1725	1	115	---	5.6	---	562	---	47254	115	5.6	5.1	300	
202	HONING MACHINE	.50	1725	1	115	230	8.8	4.4	56	---	97394	115	8.8	7.5	50	
202	BENCH GRINDER	.50	3450	1	110	---	6.2	---	118	---	79226	115	5.9	3.0	100	
202	BORING BAR	.50	3450	1	115	---	6.0	---	---	---	68899	115	6.0	8.6	50	
202	BENCH GRINDER	.50	3450	3	208	---	1.6	---	---	VHA	13174	208	1.6	1.0	100	
202	BENCH GRINDER	.50	3450	1	110	---	1.3	---	---	---	45042	115	1.2	1.9	100	
202	HEATER FAN MOTOR	.75	1725	3	208	416	2.5	1.3	---	---	71927	208	1.3	1.5	100	
202	STEAM CLEANER PUMP	.75	1725	1	115	230	13.0	6.5	856	F2	96074	115	13.0	11.7	100	
202	OVERHEAD HEATER	.75	1725	1	115	230	10.0	5.0	---	---	45717	115	10.0	5.5	100	
202	TRAN-E OH HEAT UNIT	.75	1750	3	220	440	2.4	1.2	656	PFU3	78944	208	2.4	3.1	100	
202	CONDENSATE PUMP DRV	.75	3450	3	208	220	440	2.5	1.3	---	NONE	208	2.5	2.1	300	
202	CAR WASHER	1.00	1725	1	115	---	14.0	---	F56	KD	98539	115	14.0	13.9	300	
202	N OVERHEAD HEAT FAN	1.00	1750	3	208	---	3.2	---	---	---	41244	208	3.2	2.5	100	
202	BENCH GRINDER	1.00	1800	1	110	115	13.0	---	---	C	18461	115	13.0	10.0	36	
202	FORKLIFT HOIST	1.50	1725	3	208	230	460	5.0	4.8	56C	---	97791	208	5.0	3.1	47
202	FLOOR HEATER	1.50	1740	3	220	440	4.6	2.3	224	---	41313	208	4.9	4.1	100	
202	FLOOR HEATER	1.50	1740	3	220	440	4.6	2.3	---	---	66474	208	4.9	3.7	100	
202	BLOWER HEATER	2.00	1140	3	208	416	6.6	3.3	225	EM	75290	208	6.6	5.0	100	
202	AIR COMPRESSOR	2.00	1745	3	208	---	6.6	---	145T	SC	88940	208	6.6	4.0	300	
202	PEDESTAL GRINDER	2.00	1800	3	220	440	6.0	3.0	---	2H5AG	24868	208	6.4	3.1	50	
202	HYDRAULIC HOIST (NO)	3.00	1140	3	220	440	9.2	4.6	254	K	05947	208	9.8	5.5	200	
202	HYDRAULIC HOIST (SO)	3.00	1140	3	220	440	9.2	4.6	254	K	05946	208	9.8	6.1	200	
202	AIR COMP FORKLIFT SH	5.00	1735	3	220	---	14.6	---	254	K	03727	208	15.5	14.8	200	
202	ARMATURE LATHE	---	---	---	---	---	---	---	---	---	79227	---	4.1	5.0	---	
202	OSCILLATING FAN	1	110	120	---	0.7	---	---	---	---	883625	115	0.7	0.9	100	
202	WATER COOLER	1	115	---	---	4.2	---	---	---	---	0220779	115	4.2	3.5	100	
202	AIR CONDITIONER	1	115	---	---	4.0	---	---	---	---	83511	115	4.0	3.5	100	
202	CONDENSATE PUMP	---	---	---	---	---	---	---	---	---	93734	---	6.6	5.0	---	
202	VALVE REFLACER MOTOR	---	---	---	---	---	---	---	---	---	---	---	2.1	1.0	4	
202	AIR CONDITIONER	---	3	208	---	---	---	---	---	---	93734	---	1.5	5.0	---	
202	BATT. A. OH EXHS FAN	---	1	110	120	0.7	---	---	---	---	083700	115	0.7	7.1	2016	
202	OSCILLATING FAN	---	---	---	---	---	---	---	---	---	93768	---	0.8	100	1	
202	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	90027	---	8.6	100	4	
202	AIR CONDITIONER	10.00	3500	3	220	440	25.0	12.5	284	JEX	78902	208	26.5	30.5	300	
202	AIR COND FAN MOTOR	.33	1100	1	208	230	1.5	---	DU48	FLL	96479	230	1.5	1.4	200	
203	PRESSURE PUMP TEST	.33	1725	1	115	---	6.3	---	4B	---	NONE	115	6.3	100	2	
203	DRILL PRESS	.33	1740	3	230	---	1.2	---	---	---	PAB8	45543	208	1.3	100	
203	BENCH GRINDER	.33	3450	1	115	---	6.2	---	---	---	CR200	68028	115	6.2	5.9	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS COST		
203	PEDESTAL GRINDER	.33	3600	1	115	---	4.5	---	K	19659	115	4.5	3.2		
203	RADIAL PRESS TABLE	.50	500	3	220	440	6.2	3.1	A66	73918	208	6.6	6.1		
203	DRILL PRESS	.50	1075	1	115	230	5.8	2.9	K56	90598	115	5.8	3.2		
203	CINCIN CHUCK MOTOR	.50	1140	3	230	---	2.2	---	---	92766	208	2.5	2.7		
203	HEATER MOTOR	.50	1725	1	115	230	7.0	3.5	63A	8943	115	7.0	5.2		
203	COOLANT PUMP	.50	1725	3	208	416	2.0	1.0	---	98285	208	2.0	2.7		
203	DISC SANDER	.50	1725	1	115	230	8.6	4.3	56	91041	115	8.6	4.5		
203	ROCKWELL DRILL PRESS	.50	1725	3	230	460	1.6	0.8	---	510M	089692	208	1.6	1.0	
203	COIL WINDER	.50	1725	1	110	220	8.8	4.4	RM720	B-LINE	62474	115	8.4	8.7	
203	AIR HANDLER	.50	1725	1	115	230	7.0	3.5	63A	8942	115	7.0	4.3		
203	VACUUM PUMP	.50	1725	1	115	230	8.4	4.2	56	---	---	8.4	8.2		
203	LATHE MOTOR	.50	1725	3	208	220	440	1.7	0.8	FS	74640	208	1.7	1.3	
203	ENGINE LATHE	.50	1725	3	208	220	440	1.6	0.8	J56	96553	208	1.6	1.200	
203	DRILL PRESS	.50	1760	3	220	440	2.0	1.0	---	74642	208	2.1	1.4		
203	BUFFER/MOTOR	.50	3450	1	115	---	5.0	---	5324C	89244	115	5.0	2.4		
203	GRINDER BUFFER	.50	3450	1	115	---	5.0	---	5324C	089243	115	5.0	2.7		
203	BALDOR GRINDER	.50	3450	1	115	---	4.8	---	153C	71999	115	4.8	3.3		
203	PEDESTAL GRINDER	.50	3450	3	220	440	1.4	0.7	153M	74199	208	1.5	0.7		
203	NORTON CHUCK MOTOR	.75	1135	3	220	440	5.1	2.6	203	K	75438	208	5.4	3.7	
203	PUMP MOTOR	.75	1150	3	220	440	2.8	1.4	203	---	208	3.0	2.8		
203	DELTA DRILL PRESS	.75	1725	3	220	440	2.2	1.1	47	PA	79537	208	2.3	1.5	
203	CONDENSATE PUMP	.75	3450	3	208	220	440	2.5	1.3	G56	95126	208	2.5	1.9	
203	ENGINE LATHE	1.00	1200	3	220	440	3.5	1.8	184C	HV	96553	208	3.5	1.200	
203	JIG BORE TABLE MOTOR	1.00	1600	3	220	440	4.0	2.0	612	PTB	91741	208	4.2	1.600	
203	JIG BORE SADDLE MOTO	1.00	1600	3	220	440	4.0	2.0	612	PTB	91741	208	4.2	1.600	
203	G.E. BUFFER	1.00	1720	3	220	440	3.2	1.6	203	M	---	208	3.4	1.200	
203	LOUIS ROCKF SHAPER	1.00	1720	3	220	440	7.6	3.8	163	64510	208	8.0	10.0		
203	DELTA GRINDER	1.00	1725	3	225	440	2.8	1.4	182	IS	3451	208	3.0	1.6	
203	OH AIR HANDLER WEST	1.00	1725	3	220	440	3.0	1.5	N203	---	8940	208	3.2	1.9	
203	METAL ROLL	1.00	1725	3	208	230	460	3.4	1.7	143T	96670	208	3.6	1.0	
203	TRENT MOTOR OVEN	1.00	1725	3	208	220	440	3.0	1.4	56CZ	95151	208	3.0	1.7	
203	JIG BORE SPINDLE MTR	1.00	1725	3	220	440	3.9	1.9	612	PT	91741	208	4.1	1.000	
203	WELLS BANDSAW	1.00	1750	3	220	440	3.3	1.7	A208	---	65981	208	3.5	2.5	
203	CROSS FEED	1.00	1800	3	220	440	3.8	1.8	184	MLE	97319	208	4.0	3.8	
203	GRINDER MOTOR	1.00	3400	3	208	220	440	3.6	2.8	48	L	90922	208	3.6	1.5
203	FAN MOTOR	1.00	3450	3	220	---	3.2	---	204	PM	76744	208	3.4	2.6	
203	BAND SAW	1.00	3450	1	115	230	15.0	7.5	656	---	92157	115	15.0	14.2	
203	PORTABLE AIR COMPRESS	1.00	3450	1	220	440	2.8	1.4	J56Y	TA	92766	208	3.0	3.8	
203	ELEC INSIDE GRINDER	1.00	3450	3	208	220	440	2.7	1.3	56R	---	97892	208	2.7	1.7
203	PORTABLE PIPE THREAD	1.00	3500	3	1	110	---	15.0	---	---	090689	115	14.4	9.4	
203	EXHAUST FAN EAST	1.50	1000	1	115	230	18.4	9.2	184	KC	91056	115	18.4	7.5	
203	EXHAUST FAN WEST	1.50	1000	1	115	230	18.4	9.2	184	---	91058	115	18.4	7.6	
203	HARDING LATHE	1.50	1700	3	208	220	3.6	3.4	215	P	98543	208	3.6	2.00	
203	DRILL PRESS ELEV MTR	1.50	1700	3	220	440	5.8	2.9	518S	CTK	71732	208	6.1	3.7	
203	TRACING MIL GUILL	1.50	1700	3	208	220	440	5.1	2.6	145TY-4	TVY	92695	208	5.1	2.5
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	---	6.1	---	---	---	---	208	6.1	2.3	
203	DELQUO PUMP MOTOR	1.50	1725	3	208	220	440	4.6	2.3	184	---	208	4.6	3.4	
203	ROCKWELL DRILL PRESS	1.50	1725	3	230	460	4.8	2.4	C66Y	TDR-BZ	093078	208	5.3	2.1	
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	---	6.1	---	---	---	---	208	6.1	3.9	
203	END MILL SPINDLE MTR	2.00	1725	3	230	460	6.4	3.2	210P	PS	96300	208	7.1	3.1	
203	DRILL PRESS	2.00	1725	3	208	220	440	5.8	2.9	224	TS	78623	208	5.8	4.7

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	COST	
203	OH AIR HANDLER EAST	2.00	1730	3	208 220	440	6.7	6.8	184	208	6.7	5.2	500	48	
203	FEED MTR MILL MACH	2.00	1730	3	208 220	440	6.0	3.0	184	K	94688	208	13.6	200	
203	PEDESTAL GRINDER	2.00	1800	3	220	---	6.2	---	145T	208	6.6	3.1	100	5	
203	HYDRAULIC MOTOR	2.00	1800	3	---	---	---	---	145T	208	6.3	100	---	---	
203	GRINDER MOTOR	2.00	3450	3	208	220	6.8	6.0	2040	L8	95589	208	6.8	4.0	
203	DO-ALL BANDSAW	2.00	200	3	208	220	9.0	---	---	90699	208	9.5	4.5	200	
203	WEBB METAL ROLL	3.00	1150	3	208	220	440	10.0	5.1	213T	208	10.0	6.5	100	
203	BROWN & SHARP MILL	3.00	1650	3	220	440	8.6	4.3	213	PSD1	97319	208	9.1	5.3	
203	POWER HACKSAW	3.00	1725	3	220	440	8.5	4.2	225	K	79006	208	8.9	4.5	
203	RADIAL PRESS SPINDLE	3.00	1740	3	220	440	8.4	4.2	225	---	73918	208	8.9	4.1	
203	TRAC MILL HYDR PUMP	3.00	1800	3	230	460	8.4	4.2	AVO-184	D000-29	92695	208	9.3	100	
203	PIPE THREADER	3.00	---	3	220	---	---	---	---	96433	208	---	11.3	100	
203	MILLIN MACHIN SPINDL	4.00	1720	3	208	---	13.2	---	182TY	K	97879	208	13.2	6.0	
203	MILL MACH SPIND MTR	4.00	1730	3	220	440	---	---	51909	4AV-180	97815	208	---	5.1	
203	DRILL PRESS SPND MTR	5.00	1160	3	220	440	18.0	9.0	---	2518L	CTA	71732	208	19.0	9.7
203	NIIGARA SHEARS	5.00	1735	3	220	440	15.8	7.9	---	60205	OZA	68680	208	16.7	15.1
203	PEERLESS SAW/MOTOR	5.00	1740	3	208	230	440	14.8	7.4	F184T	TD	96490	208	14.8	9.2
203	REL ROCKFORD LATHE	5.00	1750	3	220	440	14.4	7.2	CB254	---	63802	208	15.2	100	
203	PEDESTAL GRINDER	5.00	1750	3	220	---	13.2	---	---	GPEA	63931	208	14.0	6.5	
203	CINCINNATI GRINDER	5.00	1750	3	220	---	13.2	---	---	GPEA	63932	208	14.0	8.0	
203	NORTON GRINDER MOTOR	5.00	3460	3	220	440	14.2	7.1	225	K	75457	208	15.0	7.0	
203	AIR COMPRESSOR	7.50	750	3	208	---	20.6	---	284	OX	0104799	208	20.6	20.6	
203	WEBB METAL ROLL	7.50	1165	3	208	220	440	22.3	11.1	254T	---	92651	208	22.3	10.1
203	WEST ROCKFORD SHARER	7.50	1165	3	220	440	21.0	10.5	324	---	64508	208	22.2	16.0	
203	GRINDER MOTOR	7.50	1740	3	220	440	5.8	2.9	224	APK	92766	208	6.1	4.3	
203	MILLING MACH COOLANT	7.50	---	3	208	---	25.0	---	---	---	97815	208	0.3	1000	
203	MONARCH LATHE	7.50	---	3	208	---	25.0	---	---	---	093117	208	25.0	10.7	
203	PIPE THREADER	7.50	---	3	208	---	25.0	---	---	---	091222	208	3.8	100	
203	LUCAS MILL	7.50	---	3	208	---	25.0	---	---	---	089370	208	6.9	100	
203	HOIST MOTOR	7.50	---	3	208	---	25.0	---	---	---	---	---	4.5	100	
203	HYDRAULIC PUMP MOTOR	7.50	---	3	208	---	25.0	---	---	---	---	63.0	100	---	
203	MILLING MACH TABLE	7.50	---	3	208	230	9.3	6.6	---	97815	---	---	2.2	1000	
203	AIR CONDITIONER	7.50	---	3	1	208	230	4.0	---	96478	208	9.3	1.8	2	
203	WATER COOLER MOTOR	7.50	---	3	1	115	---	3.4	---	---	65449	115	4.0	3.5	
203	WATER COOLER MOTOR	7.50	---	3	1	115	---	8.0	---	---	65475	115	3.4	1.4	
203	DUMORE HIGH SP DRILL	7.50	17000	3	220	440	39.2	19.6	326	---	7986	115	8.0	0.5	
203	HIGH SPEED GRINDER	7.50	20000	3	220	440	53.6	26.8	256T	---	ST280	115	2.5	1.7	
203	BRAKE PRESS	10.00	1620	3	220	440	27.0	13.5	---	---	92655	208	28.6	22.7	
203	SPINDLE MOTOR	10.00	1760	3	208	220	440	26.8	13.4	256U	K	94688	208	26.8	7.8
203	SURFACE GRINDER	15.00	1160	3	208	---	4.0	---	4.5	0232S	CTX	98285	208	4.5	2
203	LEBLOND LATHE	15.00	1745	3	220	440	8.0	---	---	---	85480	208	41.5	13.1	
203	ENGINE LATHE POWERTU	20.00	1750	3	220	440	2.5	---	---	---	96453	208	56.7	16.5	
203	ENGINE LATHE	25.00	1760	3	220	440	27.0	13.5	364Y	K	96553	208	66.2	1200	
207	BENCH GRINDER	.50	3450	1	115	---	5.8	---	D56Y	KN	092148	115	5.8	4.3	
207	BENCH GRINDER	.50	3450	1	115	---	4.8	---	153C	---	71998	115	4.8	3.5	
207	ROCKWELL DRILL PRESS	.75	1725	3	230	460	3.0	1.5	---	513M	93576	208	3.3	2.0	
207	PORTABLE AIR COMPRES	1.00	1725	1	115	230	39.2	19.6	326	---	90682	115	14.0	11.5	
207	COMB BELT & DISC SAN	1.00	1730	3	208	416	14.0	7.0	182	---	T	None	208	3.2	
207	8" JOINTER	1.00	3450	3	200	---	3.7	---	C56	TF	98368	208	3.6	2.7	
207	BRICK SAW MOTOR	1.50	3450	1	115	230	18.2	9.1	56	---	92595	230	9.1	5.3	
207	ROCKWELL BANDSAW	2.00	1725	3	230	460	6.0	3.0	F66Y	TDR-G7	093076	208	6.6	4.0	
207	ROCKWELL RADIAL SAW	3.00	3450	3	230	460	8.2	4.1	56Y	TS	993079	208	9.1	4.5	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
207	10' UNISAW	3.00	3450	3	230 460 ---	7.4 3.7 ---	525 ---	620M	093077	208	8.2	3.5	.50	5	
207	TABLE SAW	5.00	3450	3	208 220 440	14.0 7.2 ---	525 ST	48007	208	14.0	7.5	3.00	61		
207	PLANER	5.00	3600	3	208 220 440	13.2 14.4 7.2	AFO-22 P000	93604	208	13.2	9.9	2.00	9		
207	TOPS RADIAL SAW	7.50	3450	3	208 220 440	22.0 11.0 ---	---	092903	208	22.0	20.0	2.00	64		
207	LEONARD AIR COND	---	---	-	---	---	---	---	---	---	---	---	---	---	
207	AIR CONDITIONER	---	---	-	---	---	---	---	---	---	---	---	200	---	
207	WATER COOLER	---	---	-	---	---	---	---	---	---	---	---	200	---	
207	SAWDUST COLLECTOR	10.00	3480	3	115	---	26.4 13.2 ---	284 CS	60815	115	---	9.0	100	---	
208	AIR CONDITIONER	---	---	-	208 416 ---	---	---	27011	208	26.4	23.7	3.00	114	---	
208	AIR CONDITIONER	---	---	-	---	---	---	0369	---	---	5.2	200	---	---	
208	AIR CONDITIONER	---	---	-	---	---	---	0366	---	---	1.9	200	---	---	
208	AIR CONDITIONER	---	---	-	---	---	---	0364	---	---	7.1	200	---	---	
208	AIR CONDITIONER	---	---	-	---	---	---	0368	---	---	1.0	200	---	---	
208	AIR CONDITIONER	---	---	-	---	---	---	0367	---	---	1.4	200	---	---	
209	SUMP PUMP MOTOR	.33	1725	1	115	---	10.0 3.9 ---	56	---	---	8.0	200	---	---	
209	OIL PUMP MOTOR	.50	1725	1	115 230 ---	7.8 3.9 ---	---	---	115	10.0	5.8	100	3		
209	WTR SOFT PUMP DRV MO	.50	1725	3	220	---	1.6	---	---	115	7.8	7.0	2016	65	
209	BOILER #3 STOCK DRIV	1.00	1735	3	208 220 440	3.6 3.4 1.7	182	---	45727	208	1.7	1.5	2016	47	
209	#2 STOCKER MOTOR	1.00	1735	3	208 220 440	3.6 3.4 1.7	182	CEIX	81218	208	3.6	2.1	2016	61	
209	#1 STOCKER DRIVE MTR	1.00	1735	3	208 220 440	3.6 3.4 1.7	182	CEIX	81158	208	3.6	1.9	2016	55	
209	DRAG MOTOR	1.50	1725	3	208 220 440	4.4 4.2 2.8	56	CEIX	81217	208	3.4	5.3	2016	89	
209	COAL PIT SHAK CONVEY	2.00	1140	3	220 440 ---	6.3 3.1 ---	225	K	09822	208	6.6	2.2	2016	64	
209	BOIL COAL FEED CONVY	3.00	1750	3	208	---	14.0	254Y	45729	208	14.0	3.0	2016	154	
209	BLOWER MOTOR	3.00	3475	3	208	---	9.1	145T	K	---	9.1	5.8	2016	87	
209	BLOWER MOTOR #3	3.00	3475	3	208	---	9.1	145T	K	---	9.1	5.8	2016	168	
209	BLOWER MOTOR	3.00	3475	3	208	---	9.1	145T	K	---	9.1	6.1	2016	177	
209	ELEVATOR	5.00	1730	3	208	---	9.1	145T	K	---	9.1	6.2	2016	180	
209	OVERFIRE BLOW MTR #3	5.00	1740	3	220 440 ---	14.7	254	K	12150	208	14.7	14.5	2016	421	
209	FORCED BLOWER #2	5.00	1740	3	220 440 ---	12.8 6.4 ---	254	EK	69188	208	12.8	6.3	2016	95	
209	WIND BOX FAN DRIVE	5.00	1750	3	220 440 ---	13.6 6.8 ---	254	EX	69190	208	13.5	8.7	2016	267	
209	CHEM FEED PUMP MOTOR	---	---	-	---	---	---	64558	---	---	14.4	7.5	2016	230	
221	AIR CONDITIONER EAST	---	---	-	---	---	---	---	---	---	---	3.4	2016	---	
221	AIR CONDITIONER WEST	---	---	-	---	---	---	---	---	---	---	9.9	200	---	
231	SEWING MACHINE	1725	1	110	---	5.0	---	---	---	---	---	9.6	200	---	
243	CONDENSER FAN	.33	---	3	208 440 ---	2.3	---	---	97812	115	4.8	2.3	200	4	
243	CONDENSER FAN	.33	---	3	208 440 ---	2.3	---	---	269105A	89394	208	2.3	300	10	
243	CONDENSER FAN	.33	---	3	208 440 ---	2.3	---	---	269105A	89394	208	2.3	300	10	
243	AIR HANDLER BLOWER	3.00	3460	3	208 220 440	7.6	3.8	F56	TDR-BH	89391	208	7.6	6.0	300	33
243	WATER COOLER	---	---	1	115	---	4.0	---	70B33	115	4.0	3.6	100	2	
243	COMPRESS MOTOR WEST	---	---	3	208 220 440	2.5	1.3	656	PFU3	None	208	2.5	1.9	300	5
243	COMPRESS MOTOR EAST	---	---	3	208 220 440	6.0	3.0	255-4	SES	77457	208	6.4	5.4	300	28
247	CONDENSATE PUMP DRV	.75	3450	3	208 220 440	6.0	3.0	184T	---	None	208	14.5	14.6	21	10
247	STAT AIR COMPRESSOR	2.00	1800	3	200	---	15.0	182	CDR-LE	090692	115	14.0	13.5	200	13
247	PAINT BOOTH WTR PUMP	5.00	1740	3	115 230 ---	14.0 7.0 ---	---	---	---	---	---	10.3	200	31	
247	PORT AIR COMPRESSOR	1725	1	---	---	---	---	---	---	---	---	---	200	31	
247	AIR CONDITIONER	---	---	-	---	---	---	---	---	---	---	---	300	---	
247	WATER COOLER	10.00	1725	1	115	---	4.0	21ST	---	87457	115	4.0	2.9	100	1
247	PAINT BOOTH EXHS FAN	10.00	1725	3	200	---	20.4	---	---	208	28.3	17.0	300	123	
253	SUMP PUMP MOTOR	.33	---	1	115	---	---	---	---	---	115	7.5	100	3	
253	PUMP MOTOR	2.00	1725	3	208	---	5.2	---	23B2M	40997	208	5.2	4.2	1200	73
262	ICE CRUSHER	.50	1725	1	115	---	6.8	J56	SPS	06558	115	6.8	---	100	3
302	CONDENSATE MOTOR	2.00	3460	3	200	---	6.0	---	---	208	6.0	3.0	700	29	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
302	CONDENSATE MOTOR	2.00	3460	3	200	---	6.0	---	-----	208	6.0	5.3	700	52		
302	SCHNEIDER FAN	3.00	1755	3	200	---	10.6	---	-----	208	10.6	9.0	1000	125		
304	EAST CONDENSATE MTR	1.50	3450	3	200	208	4.5	---	-----	208	4.5	3.0	700	29		
304	WEST CONDENSATE MTR	1.50	3450	3	200	208	4.4	---	-----	208	4.4	2.8	700	28		
305	FUZE CUT-OFF	.33	1725	1	115	208	7.0	3.5	-----	115	7.0	7.0	1000	32		
305	CONDENSATE MOTOR	1.50	3450	3	200	208	4.5	---	-----	208	4.5	2.5	700	24		
308	CORNER CHAIN DRV #1	.75	1725	3	230	460	2.5	1.3	SC	-----	460	1.3	.9	1500	43	
308	POWDER CONV DRIVE	.75	1725	3	230	460	2.5	1.3	SC	-----	460	1.3	.9	1500	43	
308	RETURN MOTOR	.75	1725	3	230	460	2.5	1.3	-----	460	1.3	.9	1500	43		
308	POWDER CONVEYOR	.75	1725	3	230	460	2.5	1.3	-----	460	1.3	.7	1500	33		
308	HYD PUMP MTR #1	5.00	1730	3	230	460	14.0	7.0	-----	460	7.0	4.5	1500	215		
311	LATHE-CUTTER	.75	1725	3	115	240	10.6	5.3	-----	95643	208	5.3	5.0	1500	120	
311	CONDENSATE MOTOR	.75	3450	3	230	460	2.6	1.3	-----	96570	208	2.6	1.3	700	14	
311	HYD MOTOR	5.00	1740	3	230	460	13.0	6.5	-----	94092	208	13.0	6.0	150	29	
311	LATHE-CHUCK	7.50	1725	3	220	440	20.1	10.0	-----	K	95643	208	20.1	7.0	1500	320
311A	TEST COMPRESSION	1.00	1725	3	230	460	4.4	2.2	-----	P	6635	208	4.4	2.3	1000	36
312	AIR HANDLER MOTOR	.75	1750	3	208	460	2.5	1.3	-----	41152	208	2.5	2.2	1000	31	
312	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	-----	96565	208	2.6	1.8	700	21
314	FUEL OIL PUMP MOTOR	.33	1725	3	115	230	7.0	3.5	-----	97270	208	3.5	2.1	1000	33	
314	FUEL OIL PUMP MOTOR	.33	1725	3	115	230	7.0	3.5	-----	97271	208	3.5	2.1	1000	33	
314	MARATHON MTR PUMP #2	.75	1725	3	200	400	2.6	1.3	-----	NONE	208	2.6	2.3	1000	31	
314	MARATHON MTR PUMP #1	.75	1725	3	200	400	2.6	1.3	-----	T	208	2.6	2.3	1000	31	
314	OIL PUMP	3.00	3405	3	200	400	11.4	5.7	-----	97270	208	11.4	10.1	1000	140	
314	OIL PUMP	3.00	3405	3	200	400	11.4	5.7	-----	97271	208	11.4	10.3	1000	142	
314	BLOWER MOTOR	5.00	3460	3	200	400	14.2	7.0	-----	97271	208	14.2	12.9	1000	178	
314	BLOWER MOTOR	5.00	3460	3	200	400	14.2	7.0	-----	97270	208	14.2	8.0	1000	114	
314	PUMP MOTOR	10.00	1745	3	200	400	29.9	13.0	-----	97273	208	29.9	15.0	1000	244	
314	PUMP MOTOR	10.00	1745	3	200	400	29.9	13.0	-----	97274	208	29.9	17.6	1000	244	
315	#3 FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31
315	#6 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31
315	#3 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.5	.6	-----	P	-----	460	.6	.5	2000	31
315	CONV ASSY DISCHARGE	.33	1725	3	230	460	1.2	.6	-----	P	-----	460	.6	.5	1000	16
315	POWDER PRESS DISCHRG	.33	1725	3	230	460	2.5	.5	-----	P	-----	460	.5	.5	1000	16
315	CONV UNTRAY TO ASSY	.33	1725	3	230	460	7.5	3.5	-----	P	-----	460	7.5	.6	1000	19
315	#5 FEED-IN CONNOLLY	.33	1725	3	230	460	1.6	.8	-----	P	-----	460	.8	.5	2000	31
315	DRILL PRESS	.33	1725	3	208	220	1.3	---	-----	79526	208	1.3	2.9	800	33	
315	CONV - CONE HOPPER	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.8	1000	26
315	CONV MTR ULTRA CLEAN	.33	1725	3	230	460	1.2	.6	-----	P	-----	460	.6	.6	2000	38
315	CONV CONE HOPPER	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	1000	16
315	#1 FEED-OUT CONNOLLY ASSEMBLY DISCHARGE	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31
315	CONV UNTRAY TO SWAG	.33	1725	3	230	460	1.5	.6	-----	P	-----	460	.8	.7	1000	23
315	#8 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31
315	SYNTRON BOWL #1	.33	1725	3	230	460	1.5	.8	-----	CS	NONE	115	5.2	5.4	800	20
315	POWDER PRESS #1	.33	1725	3	230	460	2.5	1.5	-----	P	-----	460	.5	.3	1000	19
315	CONV SYNTRON TO SWAG	.33	1725	3	230	460	1.5	.6	-----	P	-----	460	.6	.6	1000	19
315	#B FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31
315	CONV DISASSY GAGE MACH	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.6	1000	19
315	#6 FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.5	2000	31

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315	DISCHARGE CONVEYOR	.33	1725	3	230	460	2.5	.5		460	.5	.3	1000	10
315	BODY CONVEYOR #1	.33	1725	3	230	460	1.2	.6	P	460	.6	.5	1000	16
315	#5 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.2	.8	P	460	.8	.5	2000	31
315	TRAYING CONVEYOR	.33	1725	3	230	460	1.5	.8	P	460	.8	.7	1000	23
315	CONV MTR TRAY TABLE	.33	1725	3	230	460	1.5	.8		460	.8	.7	2000	45
315	CONVEYOR ULTRA ASSY	.33	1725	3	230	460	1.2	.6		460	.6	.5	1000	16
315	#4 FEED-IN CONNOLLY	.33	1725	3	230	460	1.2	.6	P	460	.6	.5	2000	31
315	#9 FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.8	P	460	.8	.5	2000	31
315	#10 FEED-OUT CONVEY	.33	1725	3	230	460	1.5	.8	P	460	.8	.7	2000	45
315	CONV FEED CLEANER #1	.33	1725	3	230	460	1.5	.8		460	.8	.5	1000	16
315	POWDER CONV DRIVE	.33	1725	3	230	460	1.5	.8		460	.8	.7	1000	23
315	#2 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.2	.8	P	460	.8	.7	2000	45
315	DRV DISASSY TO SWAGE	.33	1725	3	230	460	1.5	.6		460	.6	.6	1000	19
315	CONVEYOR DISCHARGE	.33	1725	3	230	460	1.2	.6	P	460	.6	.5	1000	16
315	DRV SYNTRON TO SWAGE	.33	1725	3	230	460	1.2	.6		460	.6	.5	1000	16
315	#10 FEED-IN CONVEYOR	.33	1725	3	230	460	1.5	.8		460	.8	.6	2000	38
315	ULTRASONIC CONVEYOR	.33	1725	3	230	460	1.5	.8		460	.8	.6	2000	38
315	#1 FEED-IN CONNOLLY	.33	1725	3	230	460	1.2	.8	P	460	.8	.7	2000	45
315	CONV - CONE HOPPER	.33	1725	3	230	460	1.5	.8		460	.8	.7	1000	23
315	#7 FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.8	P	460	.8	.5	2000	31
315	#7 FEED-OUT CONNOLLY	.33	1725	3	230	460	1.5	.8	P	460	.8	.9	2000	57
315	GAGING MACH FEED CON	.33	1725	3	230	460	1.5	.8		460	.8	.7	1000	23
315	GAGING MACH FEEDING	.33	1725	3	230	460	1.5	.8		460	.8	1.0	1000	31
315	CONV DRV FEED CLEAN	.33	1725	3	230	460	1.5	.8		460	.8	.7	1000	23
315	#2 FEED-IN CONNOLLY	.33	1725	3	230	460	1.5	.6	P	460	.6	.5	2000	31
315	CONVEY SWAGE MACH #1	.33	1725	3	230	460	1.5	.6		460	.6	.5	1000	16
315	AIR CONDITIONER FAN	.50	1075	3	230	460	3.2	1.6		460	1.6	1.7	700	38
315	AIR CONDITIONER FAN	.50	1075	3	460	---	2.2	---		460	2.2	2.0	700	45
315	AIR CONDITIONER FAN	.50	1075	3	230	460	3.2	1.6		460	1.6	2.0	700	45
315	AIR CONDITIONER FAN	.50	1075	3	460	---	2.2	---		460	2.2	2.1	700	47
315	#3 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	2000	57
315	W ED VARI-CROSS-OVER	.50	1725	3	208	---	4.0	---		208	4.0	3.2	2000	204
315	#5 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.7	2000	45
315	DISASSEMBLY DRIVE	.50	1725	3	230	460	2.2	1.1		460	1.1	.7	1000	23
315	#1 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	2.2	2.1	700	47
315	#9 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	2000	57
315	#4 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	2000	57
315	EXHAUST FAN	.50	1725	1	115	230	8.0	4.0		98377	8.0	7.9	1000	36
315	#9 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	1.0	2000	64
315	ASSEMBLY MACHINE	.50	1725	3	230	460	2.2	1.1		460	1.1	.6	1000	19
315	BODY UNTRAYING #1	.50	1725	3	230	440	2.2	1.1		440	1.1	.9	1000	29
315	#5 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	2000	57
315	#6 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	1.0	2000	64
315	E ED VARI-CROSS-OVER	.50	1725	3	230	460	2.0	1.0		208	2.0	1.1	2000	69
315	#8 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.7	2000	45
315	MAIN ASSEMBLY #1	.50	1725	3	230	460	2.2	1.1		460	1.1	.7	1000	23
315	GAGING MACHINE DRIVE	.50	1725	3	230	460	2.2	1.1		460	1.1	0.9	2000	57
315	ASSEMBLY DRIVE MOTOR	.50	1725	3	230	460	2.2	1.1		460	1.1	1.0	1000	31
315	TRAYING TABLE	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	1000	29
315	#1 TAPE FIXTUR CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.9	2000	57
315	#3 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	.7	2000	45
315	#6 FUZE GAGING CONLY	.50	1725	3	230	460	2.2	1.1		460	1.1	1.1	2000	71

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
315	#10 TAPE FIXTUR VARI	.50	1725	3	230	460	---	2.0	1.1	-----	-----	460	1.1	.7	2000
315	#7 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	GAGING DRIVE MOTOR	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	1000
315	CONVEYOR DRIVE #1	.50	1725	3	230	460	---	2.0	1.0	-----	-----	460	1.0	1.0	31
315	#2 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	GAGING MACHINE DRIVE	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	1.0	31
315	UNTRAY DRIVE MTR #3	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.9	1000
315	SHELL WALKER	.50	1725	3	208	---	4.0	-----	-----	-----	208	4.0	2.6	2000	
315	UNTRAYING MOTOR #2	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.9	1000
315	#10 FUZE GAGING VARI	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.9	2000
315	#2 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	POWDER CONV DRV MTR	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	1.0	2000
315	#7 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	#4 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	SHELL WALKER	.50	1725	3	208	---	4.0	-----	-----	-----	208	4.0	2.8	2000	
315	DISASSEMBLY DRIVE #1	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	1000
315	#8 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	.7	2000
315	DRIVE MTR TRAY TABLE	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	1.0	2000
315	DISASSEMBLY DRIVE	.50	1725	3	230	460	---	2.2	1.1	-----	-----	460	1.1	1.1	1000
315	CORNER CHAIN BUCKET	.75	1725	3	230	460	---	2.5	1.3	-----	-----	460	1.3	.7	1500
315	POWDER CORNER CHAIN	.75	1725	3	230	460	---	2.5	1.3	-----	-----	460	1.3	.9	1500
315	CONV - IN FEED	.75	1725	3	230	460	---	2.5	1.3	-----	-----	460	1.3	1.0	1500
315	CORNER CHAIN BUCK RE	.75	1725	3	230	460	---	2.5	1.3	-----	-----	460	1.3	.9	1500
315	PORT GRINDER MH SHP	1.00	1725	1	115	---	13.0	-----	-----	-----	115	13.0	8.7	1000	
315	BANDING CONVEYOR MTR	1.00	1725	3	208	---	6.0	-----	-----	-----	P	NONE	208	3.1	197
315	COOLING TOWER MOTOR	1.00	1740	3	230	460	---	3.8	1.9	-----	-----	460	1.9	2.0	1000
315	N CIR PUMP/HEATER RM	1.50	1745	3	230	460	---	5.2	2.6	-----	-----	460	2.6	2.3	2000
315	SOUTH CONDENSAE MTR	1.50	3450	3	200	---	4.4	-----	-----	CS	NONE	208	4.4	2.7	700
315	NORTH CONDENSAE MTR	1.50	3450	3	200	---	4.4	-----	-----	CS	NONE	208	4.4	2.4	700
315	WEST END AIR CURTAIN	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96153	208	8.2	54
315	WEST AIR CURTAIN MTR	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96154	208	8.2	50
315	WEST AIR CURTAIN MTR	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96154	208	8.2	52
315	WEST END AIR CURTAIN	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96153	208	8.2	57
315	EAST AIR CURTAIN MTR	2.00	1165	3	230	460	---	6.6	3.3	-----	P	97392	460	3.3	61
315	AIR CURTAIN MOTOR	2.00	1730	3	230	460	---	6.6	3.3	-----	P	97392	460	3.3	60
315	#2 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	197
315	#5 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	2000
315	#7 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	171
315	#1 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	147
315	#8 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	2000
315	#3 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	236
315	#6 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	191
315	#9 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	191
315	#10 MAIN/VARI CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.7	191
315	#4 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	-----	P	-----	460	3.5	223
315	CIRCULATING PUMP	3.00	3450	3	230	460	---	8.4	4.2	-----	P	98378	460	4.2	410
315	HYD PUMP MOTOR	5.00	1725	3	230	460	---	13.0	6.5	-----	P	-----	460	6.5	2000
315	#7 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	7.0	-----	P	-----	460	7.0	410
315	#1 HYD MOTOR CONLY	5.00	1730	3	230	460	---	14.0	7.0	-----	P	-----	460	7.0	400
315	UNLOAD HYD PUMP #1	5.00	1730	3	230	460	---	14.0	7.0	-----	P	-----	460	7.0	440
315	UNIT #4 W END CONVEY	5.00	1730	3	230	460	---	13.5	6.5	-----	P	-----	460	6.5	2000
315	#5 HYD MTR CONNOLLY	5.00	1730	3	230	460	---	14.0	7.0	-----	P	-----	460	7.0	410

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS COST
315	HYDRAULIC PUMP	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.1	1500
315	#9 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.1	2000
315	#6 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.0	255
315	#3 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.6	2000
315	UNLOAD HYD PUMP #2	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.7	225
315	#2 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	4.7	300
315	UNIT #3 W END CONVEY	5.00	1730	3	230	460	---	13.8	L	NONE	6.5	5.0	2000
315	#8 HYD MTR CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	5.0	319
315	#10 HYD PUMP MOTOR	5.00	1730	3	230	460	---	14.0	P	460	7.0	5.0	2000
315	#4 HYD PUMP CONNOLLY	5.00	1730	3	230	460	---	14.0	P	460	7.0	5.3	238
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.5	P	94514	6.5	3.0	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94088	6.5	3.6	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94096	6.5	3.8	248
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94091	6.5	3.0	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94090	6.5	3.0	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94089	6.5	3.6	229
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94095	6.5	3.0	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94518	6.5	3.8	242
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94093	6.5	2.8	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94513	6.5	3.0	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94515	6.5	3.2	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94094	6.5	3.0	2000
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	P	94516	6.5	4.2	268
315	EXHAUST FAN #5	5.00	1745	3	230	460	---	13.5	P	94099	6.5	2.8	2000
315	EXHAUST FAN #2	5.00	1745	3	230	460	---	13.5	P	78277	6.5	3.2	2000
315	#6 EXHAUST FAN	5.00	1745	3	230	460	---	14.6	P	88136	7.3	5.4	191
315	#7 EXHAUST FAN	5.00	1745	3	230	460	---	14.6	P	88138	7.3	5.4	171
315	EXHAUST FAN #3	5.00	1745	3	230	460	---	14.6	P	78282	7.3	4.8	152
315	EXHAUST FAN #1	5.00	1745	3	230	460	---	14.6	P	78380	7.3	4.5	144
315	EXHAUST FAN #4	5.00	1745	3	230	460	---	14.6	P	78365	7.3	4.8	175
315	VACUUM UNIT #1	5.00	3500	3	230	460	---	13.8	P	88137	6.5	1.000	152
315	VACUUM UNIT #3	5.00	3500	3	230	480	---	13.8	P	95144	6.5	5.00	73
315	VACUUM UNIT #4	5.00	3500	3	230	480	---	13.8	P	95142	6.5	4.6	2000
315	VACUUM UNIT #5	5.00	3500	3	230	460	---	13.8	P	95146	480	4.9	78
315	VACUUM UNIT #7	5.00	3500	3	230	460	---	13.8	P	95145	460	6.9	4.8
315	VACUUM UNIT #3 FROM/E	5.00	3500	3	230	460	---	13.8	P	95150	460	6.9	2000
315	EAST VACUUM UNIT	5.00	3500	3	230	460	---	13.8	P	95148	460	6.9	191
315	VACUUM UNIT (WEST)	5.00	3500	3	230	460	---	13.8	P	95147	460	6.9	197
315	HYD PUMP	10.00	1175	3	230	460	---	26.6	P	95143	6.5	6.0	2000
315	HYD PUMP MOTOR	10.00	1750	3	230	460	---	26.0	P	RGZ	---	26.6	2000
315	HYD PUMP MOTOR	10.00	1755	3	230	460	---	27.0	P	96103	13.0	6.4	547
315	HYD PUMP MOTOR	10.00	1755	3	230	460	---	27.0	P	96100	460	13.5	575
315	HYD PUMP MOTOR	10.00	1755	3	230	460	---	27.0	P	96101	460	13.5	580
315	HYD PUMP MOTOR	10.00	1755	3	230	460	---	27.0	P	96102	460	13.5	587
315	HYD PUMPS MOTOR	10.00	1755	3	230	460	---	27.0	P	96099	460	13.5	573
315	RELIANCE MOTOR	125.0	885	3	230	460	---	310.	P	98376	460	172.0	4112
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	---	40.0	P	---	460	20.0	539
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	---	40.0	P	---	460	16.0	509
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	---	40.0	P	---	460	20.0	475
315	HYD PUM CON SWAGE #1	15.00	1765	3	230	460	---	40.0	P	---	460	11.8	376

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST			
315	HYD PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	94685	460	20.0	15.0	2000	956		
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	11.6	1000	389		
315	HYD PUMP/PEL PRES #1	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	19.0	1000	606		
324	CONVEYOR LEAD CUP #2	.33	1725	3	230	460	1.4	.7	-----	-----	208	1.4	1.3	1500	62		
324	CONVEYOR LEAD CUP #3	.33	1725	3	230	460	1.5	.8	-----	-----	208	1.5	.9	1500	29		
324	GRINDER	.33	3450	1	115	-----	5.3	-----	-----	90590	115	5.3	4.5	100	2		
324	TRAYING LEAD CUP #3	.50	1725	3	230	460	2.2	1.1	-----	-----	208	2.2	1.2	1500	57		
324	CONVEYOR LEAD CUP #2	.50	1725	3	208	460	2.1	1.0	-----	-----	208	2.1	.9	1500	29		
324	TRAYING LEAD CUP #2	.50	1725	3	230	460	2.2	1.1	-----	-----	208	2.2	1.5	500	71		
324	LEAD PRES LEAD CUP 2	.50	1725	3	230	460	2.1	1.0	-----	-----	208	2.1	1.1	1500	35		
324	CONVEYOR LEAD CUP #3	.50	1725	3	230	460	2.2	1.1	-----	-----	208	2.2	1.3	1500	62		
324	LEAD PRESS #3	.50	1725	3	230	460	2.2	1.1	-----	-----	208	2.2	1.0	1500	31		
324	GRINDER	.50	3450	1	115	-----	5.0	-----	-----	87488	115	5.0	5.0	100	2		
324	GRINDER	.50	3450	3	208	-----	2.0	-----	-----	90535	208	2.0	1.9	500	14		
324	CONDENSATE PUMP	.75	3450	3	230	460	2.6	1.3	-----	-----	208	2.6	2.6	700	40		
324	DRILL PRESS	1.00	1130	3	220	440	3.4	1.7	-----	77008	208	3.4	2.0	500	16		
324	AIR COMP FOR DELUGE	1.00	1725	3	208	440	4.0	1.9	-----	-----	208	4.0	4.0	300	38		
324	BAND SAW	1.00	1725	3	220	440	3.2	1.6	-----	65277	208	3.2	1.7	500	28		
324	LATHE	1.50	1735	3	200	-----	5.2	-----	-----	TF RB3	94055	208	5.2	4.7	100	7	
324	MILLING MACHINE	1.50	1800	3	208	220	440	4.6	2.2	-----	2000	96747	208	4.6	2.8	800	28
324	AIR CONDITION BLOWER	2.00	1720	3	200	400	7.1	3.6	-----	-----	208	7.1	6.3	700	140		
324	HACK SAW	3.00	1725	3	220	440	8.5	4.2	-----	K	96387	208	8.5	3.8	500	116	
324	VACUUM UNIT HRD TEST	5.00	3500	3	230	460	13.8	6.9	-----	K	95149	460	6.9	6.1	2000	388	
324	LATHE	7.50	1735	3	220	440	20.1	10.0	-----	-----	96884	208	20.1	6.7	150	31	
324	LATHE	10.00	-----	3	480	-----	5.5	-----	-----	97194	480	5.5	5.0	900	149		
325	#2 CONDENSER FAN	.33	-----	3	208	240	2.1	-----	-----	89393	208	2.1	1.9	500	14		
325	#1 CONDENSER FAN	.33	-----	3	208	240	2.1	-----	-----	89393	208	2.1	2.5	500	17		
325	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.6	1.3	-----	96562	208	2.6	2.0	700	21	
325	AIR HANDLER	1.50	1725	3	220	-----	-----	-----	-----	NONE	208	-----	3.8	1000	57		
325	AIR CONDITIONER COMP	1.50	1725	3	208	240	37.3	-----	-----	89393	208	37.3	27.0	500	194		
325	AIR CONDITIONER	1.50	1730	3	230	460	3.8	1.9	-----	-----	89393	208	4.5	700	29		
328	COOLING TOWER FAN	2.00	1735	3	208	230	460	6.3	6.0	3.0	-----	460	3.0	3.0	1500	35	
328	BELL & GOSSETT PUMP	150.0	885	3	230	460	384.	192.	-----	98375	460	192.0	180.0	1500	8605		
505	SUMP PUMP MOTOR	.33	1725	1	115	-----	8.0	-----	-----	SP 006	115	8.0	7.9	100	4		
513	SUMP PUMP	.33	1725	1	115	-----	10.0	-----	-----	-----	115	10.0	8.6	100	4		
701	EAST AIR COMPRESSOR	.50	1725	1	115	230	10.0	5.0	-----	-----	115	10.0	9.2	6000	254		
701	WEST AIR COMPRESSOR	2.00	1725	3	230	460	6.2	3.1	-----	L	97818	208	6.2	4.9	2016	142	
701	TABLETING PRESS #6	3.00	1150	3	208	220	440	9.2	8.8	4.4	P	85990	208	9.2	4.3	1300	81
701	TABLETING PRESS #4	3.00	1150	3	208	220	440	9.2	8.8	4.4	P	-----	208	9.2	3.6	700	86
701	S. CONDENSATE PUMP	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.7	4028	90	
701	NO. CONDENSATE PUMP	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.5	4028	84	
703	AIR HANDLER	.50	1735	3	208	-----	1.6	-----	-----	-----	73497	208	1.6	1.2	5014	87	
703	AIR COMPRESSOR	1.00	1740	3	220	440	3.8	1.9	-----	-----	69358	208	3.8	3.6	5014	260	
705	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.6	1.3	-----	976569	208	2.6	1.6	4028	94	
705	AIR HANDLER MOTOR	3.00	1725	3	230	460	13.2	6.6	-----	-----	93116	460	6.6	5.7	5014	911	
705	AIR COMPRESSOR	5.00	1725	3	230	460	14.5	7.3	-----	L	97820	208	14.5	13.8	4028	795	
705	AC CONDENSER MOTOR	-----	-----	-----	4.6	-----	4.6	-----	-----	-----	93127	460	4.6	3.4	5014	544	
705	AC COMPRESSOR	-----	-----	-----	4.6	-----	50.0	-----	-----	-----	93127	460	50.0	4.3	5014	6871	
705	AIR HANDLER MOTOR	.50	1750	3	208	416	1.6	.8	-----	-----	70003	208	1.6	.9	5014	66	
708	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	3.8	1.9	-----	-----	69354	208	3.8	3.6	5014	275	
711	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	97904	208	2.8	2.8	4028	94	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
712	SHAKER MOTOR	.50	1735	3	208	220	1.2	.4	71022	208	.4	—	500	—		
715A	BAND SAW	.50	1725	3	230	460	1.6	.8	510M	208	1.6	1.0	360	5		
715A	ROCKWELL DRILL PRESS	.50	1725	3	230	460	1.6	.8	510M	208	1.6	1.1	496	3		
715A	TOOL POLISH MOTOR #3	.50	1800	3	208	416	2.3	1.2	E	—	2.3	1.5	492	10		
715A	TOOL POLISH MOTOR #1	.75	3450	3	208	220	440	5.0	2.5	—	2.5	1.2	492	9		
715A	GRINDER	.75	3450	1	115	230	—	8.2	4.1	KN	92760	115	8.2	5.3	738	
715A	MILLING MACHINE	1.00	1800	3	220	440	—	3.2	1.6	SCV	090970	208	1.6	1.7	246	
715A	TOOL POLISH MOTOR #2	1.50	1710	3	230	460	4.8	2.4	—	L	—	2.0	4.8	492		
715A	ROCKWELL LATHE	1.50	1735	3	200	—	5.2	—	TFR-BE	94054	208	5.2	3.8	492		
715A	LATHE	3.00	1160	3	220	440	9.4	4.2	—	96653	208	9.4	5.9	492		
715B	BAND SAW	.50	1725	1	115	—	8.2	—	FC	—	115	8.2	7.4	200		
715B	RADIAL ARM SAW	2.00	3425	3	208	240	480	5.0	2.5	—	89242	208	5.0	2.0	300	
715B	RIDGID PIPE VICE	1	—	115	—	—	—	—	—	97937	115	—	8.1	615		
715E	GRINDER	.50	3450	1	115	—	5.6	—	—	79204	115	5.6	2.6	600		
715E	RIDGID PIPE VICE	—	—	1	—	—	—	—	—	—	—	9.9	1476	7		
715H	CONVEYOR MOTOR	.50	1725	3	208	220	440	1.9	1.9	—	87402	208	1.9	1.0	384	
715H	EXHAUST FAN	1.00	1720	3	220	440	—	3.2	1.6	—	76183	208	3.2	2.3	1968	
715I	VACUUM PUMP MOTOR	—	—	3	—	—	—	—	—	—	—	—	—	52		
716	AC COND. FAN NORTH	7.50	—	3	440	—	10.5	—	—	—	440	10.5	7.7	1700		
716	AC COND. SOUTH UNIT	7.50	—	3	440	—	10.5	—	—	—	440	10.5	8.2	2016		
716	AC COND. FAN NORTH	—	—	3	440	—	132.	—	—	—	440	132.0	93.0	2016		
716	AC COMP. SOUTH UNIT	—	—	3	440	—	132.	—	—	—	440	132.0	80.9	2016		
716E	JONES LOADER #9	2.00	1745	3	208	—	6.8	—	CERX	89312	208	6.8	5.6	1700		
716E	JONES LOADER #8	2.00	1745	3	208	—	6.8	—	CERX	89311	208	6.8	6.4	1700		
716F	JONES LOADER #6	2.00	1745	3	208	—	6.8	—	CERX	88951	208	6.8	5.7	158		
716F	JONES LOADER #7	2.00	1745	3	208	—	6.8	—	CERX	88952	208	6.8	6.0	500		
716H	JONES LOADER #10	2.00	1745	3	208	—	6.8	—	CERX	89310	208	6.8	5.9	1700		
716H	JONES LOADER #14	2.00	1745	3	208	—	6.8	—	CERX	89635	208	6.8	6.6	1700		
717	SHAKE MOTOR	1.00	1725	1	115	230	—	13.8	6.9	—	—	115	13.8	9.0	200	
717	CONDENSATE MOTOR	1.00	3450	3	230	460	—	3.2	1.6	TSL	96082	460	1.6	1.5	1000	
717	AIR COMPRESSOR	5.00	1725	3	230	460	—	14.5	7.3	—	L	97815	208	14.5	11.5	2016
717	CONDENSER FAN	7.50	1755	3	460	—	10.5	—	—	—	—	460	10.5	13.0	2016	
717	A.C. COMPRESSOR	—	—	3	460	—	132.	—	—	—	—	460	132.0	70.6	2016	
717	AIR HANDLER	10.00	1755	3	230	460	—	25.2	12.6	K	—	460	12.6	8.9	2016	
722	CONVEYOR MOTOR	.50	1725	3	208	—	1.9	—	—	62008	208	1.9	1.9	2016		
722	EXHAUST FAN	.50	1725	1	115	230	—	3.9	1.8	—	92067	115	3.9	6.0	2016	
722	CONVEYOR MOTOR	.50	1725	3	230	460	—	14.5	7.3	—	48228	208	1.3	.9	2016	
722	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	—	—	—	—	109		
722	AIR HANDLER	1.00	1740	3	208	—	3.3	—	—	IS	41107	208	2.8	1.7	2016	
722	EXHAUST FAN	5.00	1150	3	208	440	—	14.2	7.1	K	4860A	208	14.2	5.1	2016	
722	AIR COMPRESSOR	5.00	1725	3	230	460	—	14.5	7.3	L	97821	208	14.5	8.7	2016	
722	VACUUM MOTOR	5.00	3600	3	220	—	15.8	—	—	—	95856	208	15.8	14.1	1000	
724	OIL PUMP MOTOR #1	.75	1725	3	208	220	440	2.8	2.7	PF	—	—	2.8	3.0	1968	
724	AIR COMPRESSOR MOTOR	5.00	1725	3	200	—	16.6	—	—	PF	—	208	2.8	2.3	1968	
724	STACK FAN #1	7.50	1750	3	220	440	—	20.6	10.3	A	—	—	20.6	17.6	480	
724	CONDENSATE MOTOR	—	—	3	208	—	20.6	—	—	OX	—	—	20.6	11.0	331	
724	AIR HANDLER	1.00	1740	3	208	220	440	2.8	2.7	PF	—	208	2.8	2.2	2016	
724	EXHAUST FAN	—	—	3	208	—	1.9	—	—	—	—	208	1.9	1.9	2016	
724	AIR COMPRESSOR	—	—	3	208	—	1.9	—	—	—	—	208	1.9	1.9	2016	
724	CONDENSER FAN	—	—	3	208	—	1.3	—	—	—	—	208	1.3	1.3	2016	
724	CONDENSATE MOTOR	—	—	3	208	—	1.3	—	—	—	—	208	1.3	1.3	2016	
724	STACK FAN #2	7.50	1750	3	208	—	20.6	—	—	—	—	208	20.6	9.1	1968	
724	BURNER MTR #3 BOILER	7.50	1800	3	200	—	22.4	—	—	—	—	208	22.4	10.6	1968	
724	BURNER MTR #1 BOILER	7.50	1800	3	200	—	22.4	—	—	—	—	208	22.4	11.1	1968	
724	BURNER MTR #2 BOILER	7.50	1800	3	200	—	22.4	—	—	—	—	208	22.4	10.9	1968	
724	WATERFEED PUMP #1	15.00	3515	1	200	—	42.7	—	—	—	—	208	42.7	43.8	1195	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	AN HRS	METER AMPS	AN COST			
724	WATERFEED PUMP #2	15.00	3515	3	200	---	42.7	---	---	208	42.7	46.4	1968	1266			
724	WATERFEED PUMP #3	15.00	3515	3	200	---	42.7	---	---	208	42.7	46.2	1968	1259			
726	CONDENSATE MOTOR	.75	3450	3	208	220	440	2.5	1.3	---	208	2.5	1.8	1968	50		
726	AIR HANDLER MOTOR	3.00	1750	3	208	---	8.9	---	JS	41128	208	8.9	5.7	161			
730	AIR HANDLER MOTOR	.75	1725	3	208	220	440	1.4	P	85874	208	2.8	1.7	416	10		
730	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	---	3.8	1.9	69350	208	3.8	3.3	2016	102		
732	CONDENSER FAN MOTOR	.33	---	3	208	240	---	2.3	---	---	208	2.3	1.6	5014	116		
732	AIR HANDLER	1.00	1730	3	208	220	440	3.2	1.6	K	---	208	3.2	1.6	5014	116	
732	AC COMPRESSOR MOTOR	---	---	3	208	240	---	18.2	---	---	208	18.2	14.4	5014	1041		
733	AIR COMPRESSOR MOTOR	.33	1725	1	115	230	---	5.4	2.7	---	93700	115	5.4	6.8	5014	157	
733	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	97901	208	2.8	1.7	5014	123	
733	AIR HANDLER MOTOR	1.00	1725	3	230	460	---	3.4	1.7	---	208	3.4	2.3	5014	116		
736	AIR HANDLER MOTOR	.50	1735	3	208	---	1.6	---	---	74203	208	1.6	1.1	104	2		
736	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	---	3.8	1.9	69351	208	3.8	4.2	5014	670		
739	AIR HANDLER	.50	1735	3	208	---	1.6	---	---	73650	208	1.6	1.0	5014	73		
739	AIR COMPRESSOR	2.00	1725	3	200	400	---	7.1	3.6	---	208	7.1	6.7	5014	485		
740	EXHAUST FAN	.50	1725	1	115	230	---	7.8	3.9	---	91269	115	7.8	2.8	5014	117	
741	COMPRESSOR	.75	1725	1	115	230	---	10.6	5.3	---	KFU3	115	10.6	9.2	4028	170	
741	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	98280	208	2.8	2.0	4028	116	
741	CONDENSER FAN MOTOR	1.00	---	3	208	---	5.8	---	---	93704	208	5.8	5.3	4028	308		
741	CONDENSER FAN MOTOR	1.00	---	3	208	---	5.8	---	---	93704	208	5.8	5.1	4028	296		
741	CONDENSER FAN MOTOR	1.00	---	3	208	---	5.8	---	---	93704	208	5.8	5.1	4028	296		
741	AIR HANDLER	3.00	1735	3	200	---	9.7	---	---	TDR-BE	---	9.7	8.0	4028	447		
741	COMPRESSOR MOTOR	---	---	3	208	---	10.6	---	---	93704	208	10.6	8.2	4028	4794		
744	BOX FAN	1.50	1740	3	230	460	---	4.8	2.4	---	L	---	4.60	2.4	1.7	984	24
744	W COOLING TOWER FAN	5.00	1735	3	460	---	5.0	2.2	---	CJSNB	---	460	2.4	1.8	500	29	
744	E COOLING TOWER FAN	5.00	1735	3	460	---	6.6	2.8	---	K	---	460	2.8	2.2	1500	106	
744	SCHRAMM COMPRESS #1	100.0	1770	3	230	460	---	240.	120.	---	---	460	120.0	157.5	1000	5019	
744	SCHRAMM COMPRESS #4	100.0	1770	3	230	460	---	240.	120.	---	---	460	120.0	165.4	1000	5270	
744	COMPRESSOR MOTOR	100.0	1770	3	230	460	---	240.	120.	---	---	460	120.0	124.0	492	1945	
744	SCHRAMM COMPRESS #3	100.0	1770	3	230	460	---	240.	120.	---	---	460	120.0	147.7	1000	470B	
744	WATER PUMP MOTOR	15.00	3500	3	230	460	---	38.0	19.0	---	---	460	19.0	12.4	2016	360	
744	GARD DENVER COMPRESS	200.0	1180	3	460	---	238.	---	---	K	88424	460	238.0	198.0	1000	6310	
744	COMPRESSOR MOTOR	200.0	1180	3	460	---	238.	---	---	K	97961	440	238.0	203.0	984	6237	
744	ELECTRA COMPRESSOR	400.0	1775	3	440	---	460.	---	---	K	68754	115	6.0	7.5	397.0	24397	
808	BOILER OIL FEEDER	.33	1725	3	115	208	230	6.0	3.0	56C	---	208	8.4	3.5	300	16	
809	BLOWER MOTOR	3.00	1750	3	220	416	---	8.4	---	RP-1	---	208	8.4	3.5	300	16	
809	CONDENSATE PUMP	---	---	3	208	416	---	---	---	41105	---	---	---	100	---		
812	SUMP PUMP	---	---	1	115	230	---	6.6	3.3	---	---	---	8.3	100	---	---	
816	CHEMICAL FEED PUMP	.33	1725	1	208	220	440	2.8	2.7	F56	PF	NONE	115	6.6	2016	69	
902	WATER PUMP NORTH	.75	1725	3	208	220	440	2.8	2.7	F56	PF	NONE	208	2.8	3.1	2016	85
902	AIR COMPRESSOR	5.00	1725	3	208	---	16.6	---	184T	A	NONE	208	16.6	17.4	2016	68	
902	STACK FAN MOTOR #3	5.00	1750	3	208	---	14.4	---	254	OS	02262	208	14.4	7.7	1000	180	
902	#3 BURNER MOTOR	7.50	1800	3	200	---	22.4	---	AFO-1200	COSO	NONE	208	22.4	11.5	1000	166	
902	WATER FEED PUMP	15.00	3515	3	208	---	42.7	---	254T	---	---	208	42.7	43.5	1000	627	
904	BANDING CUTTER	.33	1800	1	115	230	---	4.6	2.3	56-4206E	---	90540	115	4.6	4.1	200	4
904	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	56	---	96560	208	2.6	1.5	500	10
904	PAINT BOOTH CONVEYOR	2.00	1800	3	208	416	---	6.4	3.2	224-4	SE	45764	208	6.4	4.1	1000	59
904	VACUUM UNIT	5.00	3460	3	208	416	---	13.9	---	184T	CE4B	90934	208	13.9	11.1	500	46

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LOCATION	FUNCTION	H.P.	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST.	
904	PAINT BOOTH WTR PUMP	5.00	3500	3	208	13.8	9402	SSH	60179	208	13.8	5.0	1000	199	
904	PAINT BOOTH EXHAUST	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	4.7	1000	-----	
904	SUMP PUMP	-----	-----	-	220	440	61.2	30.6	405	-----	-----	7.5	100	-----	
905	AIR COMPRESSOR	25.00	1160	3	220	440	-----	CS	02499	440	30.6	31.0	1500	1399	
905	SUMP PUMP IN MANHOLE	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	7.9	100	-----	
909	CONDENSATE PUMP	.75	1750	3	220	440	2.6	1.3	RSS72	QZ	NONE	-----	8.2	100	-----
909	HEATER BLOWER	1.00	1725	3	220	440	3.3	1.7	204	E15	6BB24	208	2.6	1.1	200
909	SUMP PUMP	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	2.3	300	10	
910	SUMP PUMP	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	7.1	100	-----	
913	DEHUMIDIFIER	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	8.6	100	-----	
913	SUMP PUMP	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	8.8	1200	-----	
913	SUMP PUMP EAST DOCK	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	8.5	100	-----	
913	DEHUMIDIFIER	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	7.1	100	-----	
915	SUMP PUMP	-----	-----	-	-----	-----	-----	-----	96181	-----	-----	9.0	1200	-----	
920	CONVEYOR DRIVE MOTOR	.33	1725	3	220	1.4	2P	FS	26930	208	1.4	1.3	100	2	
951	PORTABLE COOLING FAN	.33	1725	3	208	2.8	-----	-----	64540	208	2.8	4.7	100	7	
951	CIRCULATING PUMP MTR	.50	1725	3	208	440	1.4	.8	35	TA	69316	208	1.4	1.5	100
951	SUMP PIT PUMP X-RAY	.50	1725	3	208	-----	1.7	-----	7240W	RA	SP 130	208	1.7	1.1	12
951	CONDENSATE PUMP	.75	3450	3	208	440	2.5	1.3	C56	P	NONE	208	2.5	2.3	200
951	RING CONVEYOR MOTOR	3.00	1160	3	208	-----	9.3	-----	254	ES	420B6	208	9.3	7.1	200
951	COOLING UNIT FAN	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	-----	-----	21	
951	FILM PROCESSOR #2	10.00	3600	3	220	440	82.4	-----	326	SK	78632	208	82.4	10.6	200
951	SYNCHRONOUS CENTER	-----	-----	-	-----	-----	-----	-----	-----	-----	-----	1.8	200	-----	
												63.8	100	97	

APPENDIX B

ACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION
BUILDING NUMBERS ABOVE 1000

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1003	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	7.8	100
1005	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	8.6	100
1006	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	4.2	100
1008	PUMP MOTOR (TANK)	.50	1725	1	115	230	7.8	3.9	56	7.8	6.3	500	14	54
1008	PUMP MOTOR	3.00	3505	3	208	10.1	182T	P	PM0724	115	10.1	7.5	500	142
1008	PIT PUMP #2	7.50	3450	3	208	23.0	213TP	LU	PM0771	208	23.0	19.8	500	120
1008	PIT PUMP #1	7.50	3450	3	208	23.0	213TP	LU	PM0725	208	23.0	16.7	500	11.1
1011	SUMP PUMP	.50	-	1	-	-	-	-	-	-	-	-	11.1	200
1011	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	8.0	100
1017	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	6.8	100
1019	SUMP PUMP IN X-RAY	-	-	-	-	-	-	-	-	-	-	-	9.8	100
1019	SUMP PUMP-MEN'S ROOM	-	-	-	-	-	-	-	-	-	-	-	9.2	100
1019	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	15.8	1200
1065	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	6.7	1200
1102	SUMP PUMP MOTOR	.33	-	1	115	-	-	-	-	-	-	-	8.4	100
1104	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	8.1	100
1105	OIL PUMP MOTOR #2	.50	1725	3	208	440	2.0	1.0	D56	208	2.0	2.0	2016	59
1105	OIL PUMP MOTOR #1	.50	1725	3	208	440	1.8	.9	D56	208	1.8	1.3	2016	38
1105	TRANSFER PUMP MOTOR	2.00	3460	3	200	-	6.9	-	R145T	208	6.9	5.5	2016	154
1105	WATER FEED PUMP #2	7.50	1745	3	200	400	23.4	11.7	213T	DP	-	23.4	2016	610
1105	WATER FEED PUMP #1	7.50	1745	3	200	400	23.4	11.7	213T	DP	-	23.4	2016	615
1105	BURNER MOTOR #1	10.00	3465	3	200	-	27.5	-	215TD	TFS BDZ	-	27.5	2016	707
1105	BURNER MOTOR #2	10.00	3465	3	200	-	27.5	-	215TD	TFS BDZ	-	27.5	2016	753
1105	SUMP PUMP	.33	1725	1	115	-	8.0	-	-	-	-	-	8.0	100
1107	CONDENSATE MOTOR	.50	1735	3	208	-	1.7	1.6	A-6B	208	1.7	1.9	200	5
1107	AIR HANDLER DRIVE	1.00	1720	3	208	220	4.6	3.4	203	K	41290	208	4.6	3.7
1109	SUMP PUMP	.33	1720	1	115	-	8.0	-	-	-	-	-	8.0	100
1109	SUMP PUMP	.33	1725	1	115	-	8.0	-	-	-	-	-	8.0	100
1109	#1 DIS COOL TUN CONV	.75	1725	3	-	-	5.3	-	L56C	P	87316	208	5.3	4.3
1109	#4 POUR CONV. DRIVE	.75	1725	3	208	-	5.3	-	L56G	P	88003	208	6.0	4.6
1109	#1 POUR CONV. DRIVE	1.00	1725	3	208	-	6.0	-	L56C	P	-	6.0	1000	78
1109	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	-	6.0	-	56C	P	-	5.4	1000	73
1109	NO. PRE-HEAT BLOWER	1.00	1745	3	200	-	4.3	-	143T	P	-	4.3	1000	80
1109	SO. PRE-HEAT BLOWER	1.00	1745	3	200	-	4.3	-	143T	GE4B	NONE	4.3	1000	80
1109	NO. PRE-HEAT CONVEY	1.00	1755	3	208	-	4.0	-	182	AEIX	NONE	4.0	3.9	1000
1109	SO. PRE-HEAT CONVEY	1.00	1755	3	208	-	4.0	-	182	AEIX	NONE	4.0	3.9	1000
1109	VACUUM UNIT	5.00	3500	3	208	-	15.8	-	184T	K	95B60	208	15.8	15.9
1111	SUMP PUMP ELEVAT PIT	.33	-	1	115	-	10.0	-	-	-	-	-	115	100
1111	SUMP PUMP N.E CORNER	.33	-	1	115	-	10.0	-	-	-	-	-	115	100
1122	SUMP PUMP	.33	-	1	-	-	-	-	-	-	-	-	8.3	100
1127	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	4.5	1000
1139	AIR HANDLER DRIVE	1.50	1730	3	220	440	5.0	2.5	184	-	-	5.0	1000	64
1140	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	9.9	1500
1202	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	8.6	100
1205	DELUGE COMPRESSOR NO	.33	1725	1	115	-	6.6	-	-	-	-	-	5.1	100
1402	DELUGE COMPRESSOR SO	.50	1725	1	115	230	8.4	4.2	48	-	-	-	6.6	107
1402	DELUGE COMPRESSOR SO	.33	1725	1	115	-	6.6	-	48	-	-	-	8.4	50
1403	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	48	-	-	-	6.6	114
1403	DELUGE COMPRESSOR SO	.50	1725	1	115	-	8.4	-	48	-	-	-	8.4	54
1404	DELUGE COMPRESSOR SO	.33	1725	1	115	230	8.4	4.2	48	-	-	-	8.4	47
1405	DELUGE COMPRESSOR NO	.33	1725	1	115	-	6.6	-	48	-	-	-	6.6	110
1405	DELUGE COMPRESSOR SO	.33	1725	1	115	-	6.6	-	48	-	-	-	6.6	127

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER ANPS	AN HRS	AN COST
1406	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96233	115	6.6	11.6	360	19
1406	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96233	115	8.4	5.8	360	10
1407	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96239	115	6.6	8.1	360	13
1407	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96239	115	8.4	3.4	360	6
1408	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96223	115	6.6	8.7	360	14
1408	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96223	115	8.4	4.9	360	8
1409	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96222	115	6.6	11.3	360	19
1409	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96222	115	8.4	5.1	360	8
1410	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96222	115	6.6	11.3	360	19
1410	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96237	115	8.4	5.7	360	9
1411	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96237	115	6.6	11.3	360	18
1411	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96229	115	8.4	6.1	360	10
1412	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96229	115	6.6	11.1	360	18
1412	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96228	115	8.4	5.1	360	8
1413	DELUGE COMPRESSOR NO	.33	1725	1	115	---	8.4	4.2	96221	115	8.4	5.9	360	10
1413	DELUGE COMPRESSOR NO	.75	1725	1	115	230	12.0	6.0	96231	115	12.0	8.2	360	19
1414	DELUGE COMPRESSOR NO	.33	1725	1	115	---	6.6	4.8	96240	115	6.6	9.0	360	15
1414	DELUGE COMPRESSOR NO	.75	1725	1	115	230	12.0	6.0	96230	115	12.0	11.1	360	18
1415	DELUGE COMPRESSOR NO	.50	1725	1	115	230	12.0	6.0	96241	115	12.0	17.4	360	29
1415	DELUGE COMPRESSOR NO	.75	1725	1	115	230	8.4	4.2	96242	115	8.4	5.7	360	9
1416	DELUGE COMPRESSOR NO	.33	1725	1	115	---	12.0	6.0	96242	115	12.0	8.2	360	14
1416	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96220	115	8.4	11.4	360	19
1417	DELUGE COMPRESSOR NO	.33	1725	1	115	230	8.4	4.2	96220	115	8.4	5.4	360	9
1417	DELUGE COMPRESSOR NO	.50	1725	1	115	230	8.4	4.2	96235	115	8.4	5.5	360	9
1418	DELUGE COMPRESSOR NO	.33	1725	1	115	230	8.4	4.2	96235	115	8.4	10.1	360	17
1418	DELUGE COMPRESSOR NO	.50	1725	1	115	230	6.6	4.8	96224	115	6.6	11.0	360	18
1419	DELUGE COMPRESSOR NO	.33	1725	1	115	230	8.4	4.2	96224	115	8.4	4.4	360	7
1419	DELUGE COMPRESSOR NO	.50	1725	1	115	230	6.6	4.8	96226	115	6.6	10.7	360	18
1420	DELUGE COMPRESSOR NO	.33	1725	1	115	230	8.4	4.2	96226	115	8.4	6.3	360	10
1420	DELUGE COMPRESSOR NO	.50	1725	1	115	230	6.6	4.8	96227	115	6.6	11.5	360	19
2001	FURNACE BLOWER	.50	1725	1	115	230	8.4	4.2	96227	115	8.4	5.5	360	9
2002	AIR COMPRESSOR	1.50	1725	1	115	230	7.4	3.7	96218	115	7.4	3.6	1000	17
2105-A	PUMP MOTOR	2.00	1740	3	220	440	17.0	8.5	P14ST	CP	17.0	7.5	1500	52
2105-A	PUMP MOTOR	75.00	1800	3	220	440	5.6	2.8	40989	203	5.6	5.6	5000	-----
2106	MIXER	.33	1725	1	115	---	6.6	4.8	505-4	SC	40988	208	180.0	5000
2106	SUMP PUMP	.33	1725	1	115	---	6.2	4.8	-----	-----	115	6.2	6.1	1000
2106	BURNER MOTOR	.33	1725	1	115	230	10.0	3.0	56C	-----	115	10.0	8.3	1000
2106	EXHAUST FAN	.50	1725	1	115	230	6.0	3.0	-----	-----	115	6.0	8.9	2016
2106	CAST SLOW MIXER	.75	1725	3	208	220	440	3.2	3.0	78181	115	7.8	7.5	500
2106	CAST SLOW MIXER	.75	1800	3	208	220	440	3.2	3.0	09350B	208	3.2	1.6	1000
2106	AUXILIARY PUMP MOTOR	2.00	1740	3	208	220	440	3.2	3.0	93507	440	1.5	1.6	1500
2106	RAPID MIX	3.00	-----	3	230	460	8.9	5.6	3.0	41067	440	3.0	2.7	150
2106	HEATER FAN MOTOR	-----	1725	1	115	---	10.0	5.0	-----	F1B2TC	SC	460	5.0	1500
2106	TANK STIR	-----	-----	-----	-----	-----	2.9	-----	-----	-----	96451	115	2.9	2.6
2106	WASH PUMP MOTOR	50.00	1170	3	220	440	126.6	63.0	504	-----	96066	-----	2.4	1000
2106	WASH PUMP MOTOR	50.00	1170	3	220	440	126.6	63.0	504	KF	41063	440	45.0	1500
2106	#2 PUMP MOTOR	75.00	1775	3	230	460	190.95	55.0	365T	-----	41064	440	55.0	2515
2106	#1 PUMP MOTOR	75.00	1775	3	230	460	190.95	55.0	365T	C0G46	0429	460	95.0	3585
2106-A	LOW LIFT PUMP MOTOR	20.00	1755	3	230	460	52.0	26.0	-----	256TP12	K	NONE	80.6	3854
2106-A	RIVER WATER PUMP	20.00	1755	3	230	460	52.0	26.0	-----	256TP12	K	90161	460	21.0
2202-1	SUMP PUMP	.33	1725	1	115	---	10.0	-----	-----	-----	NONE	115	10.0	8.2
2202-1	COMMUTATOR MOTOR	.50	1725	3	208	---	2.6	-----	P56	P	94083	208	2.6	2.0

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
2202-1	PUMP MOTOR #1	7.50	1750	3	208	220	440	21.2	20.0	208	213T	96157	20.0	1000	288	
2202-1	PUMP MOTOR #2	7.50	1750	3	208	220	440	21.2	20.0	208	213T	96156	21.2	1000	283	
2202-2	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	115	10.0	7.9	100	4	4	
2202-2	COMMUNATOR MOTOR	.50	1725	3	208	---	---	2.6	---	208	213T	940B4	2.6	750	21	
2202-2	PUMP MOTOR #2	7.50	1750	3	208	220	440	21.2	20.0	208	213T	CJ4B	None	21.2	500	116
2202-2	SEWAGE PUMP MOTOR	10.00	1740	3	208	220	440	30.8	29.0	208	256U	---	None	30.8	500	210
2202-3	SUMP PUMP	.33	1725	1	115	10.0	---	---	---	208	213T	940B5	2.6	100	4	
2202-3	COMMUNATOR MOTOR	.75	1140	3	208	---	---	3.2	---	208	213T	CJ4B	None	10.0	8.2	210
2202-3	ROOF TOP EXHST BLOW	1.00	3450	3	208	---	---	2.8	1.4	208	1218	---	---	2.1	750	23
2202-3	CENTER PUMP MOTOR #2	15.00	1740	3	220	440	---	41.0	20.5	208	326	68076	2.8	2.8	500	19
2202-3	PUMP MOTOR #1	15.00	1750	3	208	220	440	42.0	40.0	208	254T	KG	45252	41.0	37.0	500
2202-3	PUMP MOTOR #3	25.00	1180	3	208	220	440	78.0	74.0	208	324T	CJ4B	None	42.0	42.0	500
2203	EXHST BLOWER ON ROOF	.33	1750	3	208	---	---	2.0	---	208	213-22	69278	208	78.0	72.0	520
2203	EXHAUST BLOWER	.33	1750	3	208	---	---	2.0	---	208	WF	---	None	2.0	2.0	500
2203	BOILER FAN EXHAUST	.50	1725	3	208	220	440	1.7	.8	208	66	FS	74156	1.7	1.0	500
2203	GEAR REDUCING PUMP	.50	1775	3	230	460	---	3.0	1.5	208	143T	40996	---	---	500	47
2203	AGITATOR MOTOR	.75	1750	3	230	460	---	2.9	1.5	208	143T	---	None	2.9	42.0	500
2203	SLUDGE PUMP	2.00	1140	3	208	---	---	7.8	---	208	213-22	LGH	None	7.8	7.8	500
2203	PUMP MOTOR	5.00	870	3	208	---	---	17.5	---	208	254TC	TGS-BCV	None	17.5	17.5	500
3005	SUBMER SUMP PUMP NW	.33	---	1	110	---	---	9.0	---	208	---	---	---	---	1.0	100
3005	SUBMER SUMP PUMP SE	.33	---	1	110	---	---	9.0	---	208	---	---	---	8.6	100	---
3012	SUB SUMP PUMP	.33	---	1	115	---	---	8.0	---	208	---	---	---	8.6	100	4
3015	SUB SUMP PUMP OUT SO	.33	---	1	115	---	---	---	---	208	---	---	---	8.6	100	4
3015	SUB SUMP PUMP OUT NO	.33	---	1	115	---	---	---	---	208	---	---	---	8.6	100	4
3015	SUMP PUMP	.33	---	1	115	---	---	---	---	208	---	---	---	8.6	100	4
3016	SUMP PUMP	.33	---	1	110	---	---	---	---	208	---	---	---	7.5	100	3
3016	SUMP PUMP	.33	---	1	110	---	---	---	---	208	---	---	---	8.3	100	4
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	---	---	4.0	---	208	184P	JU	None	4.0	100	100
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	---	---	4.0	---	208	184P	JU	None	4.0	100	100

APPENDIX C

INACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION
BUILDING NUMBERS BELOW 999

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
102	EXHAUST FAN	.75	1750	1	115	230	10.4	5.2	C66	70968	115	10.4	-----	-----	
102	EXHAUST FAN	.75	1750	1	115	230	10.4	5.2	C66	70966	115	10.4	-----	-----	
102	EXHAUST FAN	.75	1750	1	115	230	10.4	5.2	C66	70970	115	10.4	-----	-----	
102	EXHAUST FAN	.75	1750	1	115	230	10.4	5.2	C66	70976	115	10.4	-----	-----	
202	AIR CONDITIONER	-----	-----	-----	-----	-----	-----	-----	-----	89902	-----	-----	-----	-----	
203	VACUUM PUMP MOTOR	.50	1725	3	220	440	1.6	0.8	P804B	284	-----	-----	-----	-----	
203	OIL PUMP DRIVE MOTOR	.50	1725	3	220	440	2.0	1.0	456	SC	55876	208	2.1	-----	
203	AIR COND., COMP MOTOR	2.00	-----	1	230	-----	12.8	-----	-----	B1036	230	12.8	-----	-----	
209	ANTI-SMOG BLOWER #3	7.50	1750	3	208	-----	22.6	-----	213-P	RGZ	-----	-----	33.1*	-----	
209	ANTI-SMOG FAN #2	7.50	1750	3	208	-----	22.6	-----	213-P	RGZ	-----	-----	32.2*	-----	
209	ANTI-SMOG FAN #1	7.50	1750	3	208	-----	22.6	-----	213-P	RGZ	-----	-----	37.5*	-----	
210	FUEL OIL PUMP HOUSE	7.50	1160	3	208	-----	21.2	-----	324	-----	05678	208	21.2	13.7*	
210	FUEL OIL PUMP HOUSE	7.50	1160	3	208	-----	21.2	-----	324	-----	05677	208	21.2	14.6*	
221	DRILL PRESS MOTOR	.50	1725	1	115	250	7.6	3.8	-----	46102	115	7.6	-----	-----	
221	COAL GRINDER	5.00	1150	3	220	440	14.6	7.5	NA-284	G2X	04725	208	15.5	-----	
243	BURNER MOTOR	.33	1750	1	110	230	5.2	2.6	-----	RIP	40882	115	5.0	-----	
243	PUMP DRIVE MOTOR	.50	1725	3	208	220	440	2.6	H56	SC	88420	208	2.6	-----	
243	AIR HANDLER	.50	1725	3	220	440	1.6	0.8	66Y	TP	087090	208	1.7	-----	
302	WASH-COLLECTOR	1.00	1725	3	208	220	3.6	3.4	-----	-----	-----	208	3.6	2.5*	
305	BLENDER	1.00	1725	3	200	-----	4.7	-----	-----	-----	94590	208	4.7	-----	
305	SCREENER	2.00	1730	3	208	-----	7.5	-----	-----	-----	95155	208	7.5	-----	
305	SCHNEIBLE FAN	3.00	1755	3	200	-----	10.6	-----	-----	-----	-----	208	10.6	-----	
305	ELEVATOR DRIVE	7.50	1730	3	200	-----	26.0	-----	-----	-----	-----	208	26.0	23.5*	
306	TAPE FIX CONVEY SO.	.50	1725	3	230	460	2.0	1.0	-----	P	-----	208	2.0	1.2*	
306	UNLOADING TABLE MTR	.50	1725	3	230	440	2.2	1.1	-----	P	-----	208	2.2	1.2*	
306	TRAYING MOTOR	.50	1725	3	220	440	2.0	1.0	-----	P	-----	208	2.0	1.0*	
306	GRENADE FEED WHEEL	.50	1725	3	230	440	4.4	2.2	-----	P	-----	208	4.4	3.2*	
306	TAPE FIX CONVEY MID.	.75	1725	3	208	-----	5.3	-----	-----	P	-----	203	5.3	3.7*	
306	TAPE FIX CONVEY NO.	.75	1725	3	208	-----	5.3	-----	-----	P	-----	208	5.3	5.7*	
306	MAIN DRIVE MOTOR	5.00	1160	3	200	-----	17.9	-----	-----	-----	-----	208	17.9	10.0*	
311	NORTH LATHE	7.50	1750	3	220	440	18.4	9.2	-----	-----	85079	208	18.4	7.0*	
312	AIR CONDITIONER	-----	-----	-----	-----	-----	-----	-----	-----	78831	-----	-----	-----	-----	
315	S CIR PUMP/HEATER RM	1.50	1745	3	210	460	5.2	2.6	-----	-----	460	2.6	-----	-----	
316	EXHAUST FAN	.50	1750	3	208	-----	2.0	-----	H1356	IS	45621	208	2.0	-----	
324	EXHAUST FAN BATT SHP	5.00	1745	3	208	220	440	15.0	14.0	7.2	-----	208	15.0	-----	
505	CONDENSATE PUMP MTR	.50	1130	3	220	440	2.1	1.0	-----	E18	74292	208	2.2	-----	
505	BLENDER MOTOR	1.50	1150	3	208	-----	5.3	-----	-----	-----	02351	-----	-----	-----	
505	PELLET CHERRY BURREL	1.50	1730	3	220	440	4.6	2.3	-----	-----	85740	-----	-----	-----	
505	#5 CUBICLE MOTOR	3.00	1160	3	208	-----	8.6	-----	-----	-----	-----	19716	-----	-----	
505	#4 CUBICLE MOTOR	3.00	1150	3	220	440	14.2	7.1	-----	-----	-----	K	70902	-----	
505	#3 STOK PRES CUBICLE	5.00	1730	3	208	-----	14.7	-----	-----	-----	-----	254	12148	-----	
505	#1 CUBICLE STOKES	5.00	1730	3	208	-----	14.7	-----	-----	-----	-----	254	12149	-----	
505	VACUUM MOTOR	5.00	3475	3	220	440	13.0	6.5	-----	-----	233	YES	76352	-----	
505	VACUUM UNIT DRIVE	5.00	3475	3	208	-----	13.0	6.5	-----	-----	225	JES	26492	-----	
505	PRESS CHERRY BURRELL	7.50	1760	3	208	220	440	21.2	10.6	-----	-----	-----	K	90342	-----
507	DRIVE MOTOR	.33	1725	3	208	-----	2.1	-----	-----	-----	-----	-----	-----	75994	-----
507	DRILL PRESS DRIVE	.50	1130	3	208	-----	2.4	-----	-----	-----	163	E1S	-----	-----	
507	WEST MARKING MACHINE	.50	1725	3	208	-----	2.5	-----	-----	-----	56C	-----	-----	-----	
507	MARKING MACHINE	.50	1725	3	208	-----	2.5	-----	-----	-----	56C	-----	-----	-----	
507	CONDENSATE PUMP	.50	1730	3	208	220	2.1	-----	-----	-----	XV6	69300	-----	-----	
507	CONVEYOR DRIVE MOTOR	1.00	1720	3	220	440	3.1	1.5	-----	-----	203	K	65506	-----	

* Active motors but annual hours of operation are not known.

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
SC-7	BLISS MACHINE MOTOR	1.00	1725	3	208	---	3.3	203	PA	68568	---	---	---	---
507	BLISS PRESS MOTOR	1.00	1725	3	208	---	3.1	204	K	24695	---	---	---	---
507	CONVEYOR DRIVE MOTOR	3.00	1750	3	208	---	8.9	---	HP1	21031	---	---	---	---
509	AUX WATER PUMP MOTOR	.50	1735	3	208	---	1.6	---	NONE	00048	---	---	---	---
509	OIL PUMP MOTOR	.75	1725	3	208	---	2.4	---	NONE	45503	---	---	---	---
509	BOILER MOTOR	3.00	3450	3	208	220	8.8	8.0	---	224-Y	---	---	---	---
509	#1 BOILER MOTOR	3.00	3450	3	208	220	8.8	8.0	---	224-Y	CS	45575	---	---
509	#1 STACK FAN MOTOR	5.00	1750	3	208	---	14.4	---	---	254	OS	02346	---	---
509	#2 STACK FAN MOTOR	5.00	1750	3	208	---	14.4	---	---	254	OS	02347	---	---
511	CONDENSATE MOTOR	.50	1725	3	208	440	1.7	.9	---	45576	---	---	---	---
511	EXHAUST BLOWER MOTOR	.50	3450	1	115	---	7.8	---	---	56	---	81169	---	---
511	BLOWER DRIVE MOTOR	1.50	1730	3	220	440	6.2	3.1	204	K	80418	---	---	---
511	STENCIL MACHINE	.33	1725	3	208	220	1.2	1.1	---	70583	---	---	---	---
513	DRILL PRESS DRIVE	.50	1140	3	208	440	1.9	---	J3D	K	77038	---	---	---
513	CONDENSATE PUMP	.50	1720	3	220	416	16.0	8.0	---	41164	---	---	---	---
513	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	440	1.6	---	741BRC	PA	67370	---	---
513	CONVEYOR DRIVE MOTOR	.75	1425	3	208	220	440	2.6	1.3	L-56	P	85064	---	---
513	CONVEYOR MOTOR	.75	1725	3	208	220	440	2.4	1.2	7420	WRC	PA	76694	---
513	NO. TO SO. CONVEYOR	1.00	1130	3	220	440	3.8	1.9	---	44117	---	---	---	---
513	CONVEYOR TAPING MACH	1.00	1725	3	208	---	3.1	204	---	K	26949	---	---	---
513	CONVEYOR DRIVE MOTOR	3.00	1725	3	220	440	2.4	1.2	7420	PA	76693	---	---	---
513	VACUUM PUMP MOTOR	5.00	1735	3	220	440	14.0	7.0	215	USE	88572	---	---	---
513	VACUUM UNIT MOTOR	5.00	3475	3	220	440	13.0	6.5	225	JES	60267	---	---	---
513	VACUUM MOTOR	5.00	3475	3	220	440	13.0	6.5	225	JES	45626	---	---	---
513	#2 PRESS MOTOR	7.50	1150	3	220	440	21.2	10.6	324	AP ZZ	75959	---	---	---
513	#1 PRESS MOTOR	7.50	1150	3	220	440	23.4	11.7	224	AP ZZT	75958	---	---	---
515	EXHAUST FAN DRIVE	.33	1140	3	220	440	11.0	5.5	A-66	---	NONE	---	---	---
515	7" BENCH GRINDER	.50	3450	1	115	---	5.0	---	---	68114	---	---	---	---
515	7" WHEEL BENCH GRIND	.50	3450	1	115	---	5.8	---	B-56Y	KN	91060	---	---	---
515	SPARE MOTOR	.75	1125	3	220	440	2.8	1.4	204	K	70006	---	---	---
515	HEATER FAN MOTOR	1.140	1	115	---	4.2	---	---	FH	NONE	---	---	---	---
515	ELEC WAX HEAT POT	-----	-----	1	220	---	16.0	---	SYL15WS	12	77559	---	---	---
515	COMPRESSOR MOTOR	100.0	1185	3	440	---	118.	---	580C	12	76090	---	---	---
515	COMPRESSOR MOTOR	75.00	1180	3	220	440	183.	93.0	607	CS	02203	---	---	---
712	GRINDER COOLANT PUMP	.50	1725	3	208	---	1.7	---	MP	17657	208	1.7	---	---
715A	HYDRA GRINDER	2.00	1140	3	220	440	1.7	.9	---	27838	208	1.7	.8*	---
715A	SPINDLE GRINDER	3.00	1725	3	220	440	7.2	3.6	---	27838	208	7.2	4.6*	---
807	AIR COMPRESSOR	.50	1725	3	208	---	9.0	4.5	---	27838	208	9.0	4.5*	---
807	CONDENSATE PUMP	.75	1735	3	208	---	1.6	---	ZD1-B-6	---	02002	---	---	---
807	BLOWER DRIVE	2.00	1750	3	208	---	2.6	---	A66	---	59230	---	---	---
807	AIR DRYER	3.00	1750	3	208	---	6.7	---	225	---	10691	---	---	---
809	SPEED SEALER	.33	1725	1	115	---	8.9	---	225	---	79494	---	---	---
809	CROSS CONVEYOR	.33	1725	3	208	---	6.3	---	56	---	90918	---	---	---
809	HEAT SEALER	.33	1725	1	115	---	1.2	---	5825W	PA	45602	---	---	---
809	CONDENSATE PUMP	.50	1735	3	208	416	1.6	---	F56	---	90953	---	---	---
809	CONVEYOR DRIVE	.75	1725	3	208	---	2.5	---	---	41105	---	---	---	---
809	GRINDER	1.00	1700	-	220	---	9.2	---	---	W20896	26469	---	---	---
809	VOLUMETRIC	1.00	1720	-	220	440	3.1	1.6	203	K	65507	---	---	---
809	VOLUMETRIC	1.00	1725	3	208	---	3.3	1.7	203	PA	68570	---	---	---
809	BACKOUT CONVEYOR	1.00	1725	-	220	440	3.6	1.8	182Y	K	79495	90919	GKKF	90919

* Active motors and annual hours of operation are not known.

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
809	#3 HEAD TO BODY	2.00	1735	3	208	---	6.2	---	67178	---	---	---	---	---
809	#2 HEAD TO BODY	2.00	1750	3	208	---	5.8	---	225	---	---	---	---	---
809	#1 HEAD TO BODY	2.00	1750	3	208	---	6.0	---	225	---	14470	---	---	---
809	BLOWER FAN	3.00	1750	-	220	440	8.4	4.2	225	---	77359	---	---	---
809	BLOWER FAN	3.00	1750	-	220	440	8.4	4.2	225	---	77359	---	---	---
812	EXHAUST BLOWER	.33	1140	-	220	---	1.1	---	208	---	70939	---	---	---
812	EXHAUST FAN	.33	1140	3	208	---	1.6	---	208	---	71066	---	---	---
812	SUMP PUMP	.33	1725	1	115	---	10.0	---	75V	HP	11916	---	---	---
812	EXHAUST BLOWER	.50	1140	3	208	---	2.0	---	208	---	74288	---	---	---
812	AIR COMPRESSOR	.50	1725	3	208	---	2.0	---	HBG	---	46106	---	---	---
812	CONDENSATE PUMP	.50	1725	-	115	220	3.9	1.6	PLW66K	K	69371	---	---	---
812	CONVEYOR	.50	1725	3	208	---	1.9	---	203	K	69967	---	---	---
812	EXHAUST FAN	.50	3450	3	208	---	1.5	---	203	---	66562	---	---	---
812	CONVEYOR	.75	1725	3	208	---	3.2	---	75U	HP	69974	---	---	---
812	BLOWER	.75	1725	-	220	440	2.6	1.3	208	---	70930	---	---	---
812	COND. PUMP	.75	1725	3	208	---	2.4	---	208	---	70928	---	---	---
812	PUMP DRIVE	.75	3500	-	220	440	2.6	1.3	PLW66K	K	69975	---	---	---
812	AIR CONDITIONER	1.00	1720	-	220	440	3.2	1.6	203	K	69967	---	---	---
812	CONVEYOR	1.00	1720	-	220	440	3.4	1.6	203	---	65529	---	---	---
812	BLOWER	1.00	1750	-	220	440	3.2	1.6	203	---	24693	---	---	---
812	CONVEYOR	1.00	1750	-	220	440	3.2	1.6	203	---	66358	---	---	---
812	#2 FOILING MACHINE	2.00	1155	3	208	---	6.6	---	203Y	---	64048	---	---	---
812	#3 FOILING MACHINE	2.00	1155	3	208	---	6.6	---	225	---	79146	---	---	---
812	#4 FOILING MACHINE	2.00	1155	3	208	---	6.6	---	225	---	70930	---	---	---
812	#1 FOILING MACHINE	2.00	1160	3	208	---	6.7	---	225	HPI	09796	---	---	---
812	#2 PRIMERHEAD	2.00	1720	-	220	440	5.6	2.8	225	CS	62819	---	---	---
812	#1 PRIMERHEAD	2.00	1720	-	220	440	5.6	2.8	225	CS	62818	---	---	---
812	BLOWER	5.00	1750	-	220	440	14.0	7.0	254	CSP	69971	---	---	---
812	BLOWER	7.50	1740	-	220	440	20.6	10.3	BA264	---	60589	---	---	---
812	VACUUM PUMP	7.50	1800	-	220	440	22.3	10.5	256V	E	90927	---	---	---
812	AIR COND COMPRESSOR	50.00	1765	3	208	416	126.	63.0	405S	K	78756	---	---	---
813	CHEMICAL MIXER	.50	1735	3	208	---	1.6	---	208	---	41087	---	---	---
813	OIL PUMP	.75	1725	3	208	---	2.4	---	J56	SO	90512	---	---	---
813	#1 BURNER	3.00	3450	3	208	---	8.8	---	224Y	CS	45792	---	---	---
813	#2 BURNER	3.00	3450	3	208	---	8.8	---	224Y	CS	45791	---	---	---
813	#1 STACK FAN	5.00	1740	3	208	---	13.6	---	254	---	41275	---	---	---
813	#2 STACK FAN	5.00	1740	3	208	---	14.4	---	204	K	01791	---	---	---
814	CONDENSATE PUMP	.50	1735	3	208	---	1.6	---	208	---	69373	---	---	---
814	HEATER BLOWER	1.50	1730	-	220	440	6.2	3.1	204	K	41141	---	---	---
816	SUMP PUMP	.33	1725	1	115	---	10.0	---	208	---	45791	---	---	---
816	CONDENSATE PUMP	.75	1735	3	208	---	2.6	---	208	---	41275	---	---	---
818	AIR COMPRESSOR	100.0	1175	3	440	---	120.	---	544	KF	62737	---	---	---
818	AIR COMPRESSOR	100.0	1175	3	440	---	120.	---	544	KF	62735	---	---	---
841	CONDENSATE PUMP	.50	1140	3	208	---	2.0	---	750	---	79497	---	---	---
841	EXHAUST FAN	.50	1140	3	208	---	2.0	---	750	---	79498	---	---	---
901	S. CONDENATE PUMP	2.00	3500	1	115	230	22.0	11.0	182JM	CS	NONE	---	---	---
901	N. CONDENATE PUMP	2.00	3500	1	115	230	22.0	11.0	182JM	CS	NONE	---	---	---
902	PORTABLE GEAR PUMP	3.00	1740	3	208	220	440	9.0	B.8	4.4	JS213	PF	NONE	---
902	FUEL OIL GEAR PUMP	3.00	1740	3	208	220	440	9.0	B.8	4.4	JF213	PF	NONE	---
902	STACK BLOWER FAN #2	5.00	1738	3	208	---	14.6	---	254	K	08512	---	---	---
902	#2 BURNER MOTOR	7.50	1800	3	200	---	22.4	---	204	COSO	AFO-1200	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
902	SPARE BOIL FEED PUMP	15.00	3470	3	200	40.5	-----	215T	C064B	NONE	-----	-----	-----	-----
902	WATER FEED PUMP	15.00	-----	3	208	-----	254T	-----	-----	-----	-----	-----	-----	-----
904	VACUUM SWEeper	.33	3450	1	115	230	5.6	56C	-----	64298	-----	-----	-----	-----
904	JOHNSON BAND SAW	.50	1725	1	115	230	10.0	F56	-----	090684	-----	-----	-----	-----
904	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	440	F-66	-----	74116	-----	-----	-----	-----
904	CONVEYOR VARI-DRIVE	.50	1730	3	208	-----	7.8	145TO	P	NONE	-----	-----	-----	-----
904	VACUUM CLEANER MOTOR	.50	3450	1	115	208	230	D56C	KF	NONE	-----	-----	-----	-----
904	VENT BLOWER MOTOR	.50	3450	3	208	-----	1.5	-----	K	41226	-----	-----	-----	-----
904	CONVEYOR GEARHEAD	.75	1725	3	220	440	2.2	1.1	7425	PA	41994	-----	-----	-----
904	OVEN FEED CONVEYOR	.75	1725	3	208	220	2.4	1.2	7420WPW	PA	70882	-----	-----	-----
904	CONVEYOR DRIVE MOTOR	.75	1725	3	230	460	3.6	1.8	CR56W-217	-----	NONE	-----	-----	-----
904	COOLING FAN MOTOR	.75	3515	3	230	460	2.2	1.1	56	-----	NONE	-----	-----	-----
904	HEATER MOTOR	1.00	1140	1	115	230	9.4	4.7	7437	RA	NONE	-----	-----	-----
904	HEATER MOTOR	1.00	1140	1	115	230	9.4	4.7	7437	RA	NONE	-----	-----	-----
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	BOX CUTTER MOTOR	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	460	3.6	1.8	H143T	PF	96447	-----	-----	-----
904	BOX CUTTER MOTOR	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	CONVEYOR MOTOR #12	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	CONVEYOR DRIVE MOTOR	1.00	1740	3	230	460	3.6	1.8	H143T	PE	NONE	-----	-----	-----
904	BOX CUTTER MOTOR #9	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	BOX CUTTER MOTOR #6	1.00	1740	3	230	460	3.6	1.8	H143T	PF	NONE	-----	-----	-----
904	OVEN DISCHRG CONVEY	1.00	1800	3	208	220	440	4.2	4.1	6-5-6-5	BAB-EFG	NONE	-----	-----
904	HYDRAULIC TABLE LIFT	1.00	3450	3	230	460	3.4	1.7	H42Y	PN	NONE	-----	-----	-----
904	EXHAUST FAN MOTOR	1.50	1710	3	230	460	4.6	2.2	145T	D	NONE	-----	-----	-----
904	BLOWER DRIVE MOTOR	2.00	1750	3	208	-----	5.8	-----	225	Q8	75582	-----	-----	-----
904	BLOWER DRIVE MOTOR	2.00	1750	3	208	-----	5.8	-----	225	Q5	75583	-----	-----	-----
904	HYDRAULIC TABLE LIFT	2.00	1750	3	208	220	440	5.7	5.4	2.7	56Y7524M	-----	NONE	-----
904	N.E. END OVEN SYSTEM	3.00	1740	3	230	460	9.2	4.6	1B2T	CE4B	NONE	-----	-----	-----
904	VACUUM PUMP MOTOR	5.00	3475	3	220	440	13.0	6.5	225	JES	80760	-----	-----	-----
904	CONVEYOR DRIVE	-----	-----	3	-----	-----	-----	-----	-----	-----	68489	-----	-----	-----
904	HYDRAULIC PUMP MOTOR	15.00	1170	3	230	460	39.2	19.6	284T	RG2	NONE	-----	-----	-----
904	BALER MOTOR	20.00	1750	3	230	460	50.0	25.0	2561	-----	NONE	-----	-----	-----
904	AIR COMPRESSOR	25.00	1160	3	220	440	61.2	30.6	405	-----	60186	-----	-----	-----
905	HEATER MOTOR	.33	1725	3	-----	-----	1.2	-----	33	PA	63847	-----	-----	-----
905	CONVEYOR DRIVE MOTOR	.50	1800	3	-----	-----	2.0	-----	163	IS	Q2394	-----	-----	-----
905	CONDENSATE PUMP	.75	1725	3	208	416	2.5	1.3	-----	VAVRFED	NONE	-----	-----	69240
905	PUMP MOTOR	1.00	1725	3	-----	-----	3.4	-----	56	-----	69874	-----	-----	-----
905	COMPRESSOR MOTOR	1.50	1750	3	208	-----	4.7	-----	224	E1S	45546	-----	-----	-----
905	WATER PUMP MOTOR	1.50	3450	3	-----	-----	5.3	-----	M560	P	NONE	-----	-----	-----
905	WATER PUMP MOTOR	1.50	3450	3	-----	-----	5.3	-----	M560	P	NONE	-----	-----	-----
905	ELEVATOR MOTOR	5.00	1000	3	208	-----	18.0	-----	284	AF	75536	-----	-----	-----
905	ROTO CLONE MOTOR	5.00	1740	3	-----	-----	14.0	7.0	254	APZZ	65414	-----	-----	-----
905	CONVEYOR DRIVE MOTOR	5.00	1740	3	208	-----	15.0	-----	184TC	P	NONE	-----	-----	-----
905	ROTO CLONE BLOWER	5.00	1740	3	220	440	12.3	6.0	-----	-----	FK-25-4	79298	-----	-----
905	ROTO CLONE MOTOR	5.00	1740	3	-----	-----	14.0	7.0	254	APZZ	65413	-----	-----	-----
905	ROTO CLONE MOTOR	5.00	1745	3	-----	-----	14.0	7.0	254	JES	69489	-----	-----	-----
905	PORTABLE VACUUM PUMP	5.00	3475	3	220	440	13.0	6.5	225	JEX	12036	-----	-----	-----
905	KETTLE MOTOR	10.00	1160	3	220	440	26.2	13.1	-----	-----	-----	-----	-----	-----
905	WEST KETTLE MOTOR	10.00	1170	3	208	220	32.0	30.0	256T	CE4B	NONE	-----	-----	-----
905	ROTO CLONE MOTOR	10.00	3500	3	-----	-----	-----	-----	284	JEX	60157	-----	-----	-----

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
906	#1 RED WATER PUMP	5.00	1745	3	230	460	---	15.2	7.6	213/TP-10	K	847377	---	---
906	#2 RED WATER PUMP	5.00	1745	3	230	460	---	15.2	7.6	213/TP-10	K	847378	---	---
906	#3 RED WATER PUMP	5.00	1745	3	230	460	---	15.2	7.6	213/TP-10	K	761862	---	---
906	#4 RED WATER PUMP	5.00	1745	3	230	460	---	15.2	7.6	213/TP-10	K	761863	---	---
907	CONT.-FEED PUMP	.50	1725	1	115	230	---	7.6	3.9	56	-----	L47729	---	---
907	AIR COMPRESSOR DRIVE	1.00	1725	1	115	230	---	13.2	6.6	56	-----	563664	---	---
907	HOIST DRIVE MOTOR	1.50	1760	3	208	---	4.9	-----	132TDZ	K	L927734	---	---	
907	PRECOAT PUMP DRIVE	3.00	3505	3	208	---	10.1	-----	182T	P	L647841	---	---	
907	#2 PUMP DRIVE - EAST	7.50	3450	3	208	---	23.0	-----	213	TP	LU	K946899	---	---
909	OSMEFAN	1	110	---	110	---	.6	-----	-----	-----	-----	NONE	---	---
910	CONVEYOR MOTOR	.50	1725	3	220	---	1.9	-----	63A	K	25033	---	---	
910	CENTER CONVEYOR	.50	1725	3	208	---	1.8	-----	X66	HP	75328	---	---	
910	BOX CAR CONVEYOR	.50	1725	3	220	440	---	1.6	.8	PA	75332	---	---	
910	CONVEYOR DRIVE MOTOR	.50	1725	3	220	440	---	1.6	.8	741BRW	PA	75334	---	---
910	CONVEYOR MOTOR	.50	1725	3	208	220	440	1.6	.8	F66	PA	74119	---	---
910	CONVEYOR MOTOR	.50	1725	3	220	440	---	1.6	.8	741BRW	PA	74120	---	---
910	CONVEYOR MOTOR	.50	1725	3	220	440	---	1.8	.9	X66	HP	75335	---	---
910	CONVEYOR DRIVE MOTOR	.75	1725	3	220	440	---	2.4	1.2	7420	PA	74124	---	---
910	CROSS CONVEYOR MOTOR	.75	1725	3	208	220	440	2.4	1.2	7420WPD	PA	68867	---	---
910	CONVEYOR MOTOR	.75	1725	3	208	440	---	2.4	1.2	7420W	PA	67190	---	---
910	UNIT CONVEYOR DRIVE	.75	1725	3	208	---	2.4	1.2	7420WRC	PA	69770	---	---	
910	CONVEYOR MOTOR	1.00	1150	3	220	440	---	3.6	1.8	204	HP1	74682	---	---
910	SOUTH CONVEYOR	1.00	1170	3	220	440	---	4.8	2.4	13-224-4	VE-VEV	74773	---	---
910	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	---	6.0	-----	L56C	P	NONE	---	---	
910	CENTER CONVEYOR	1.00	1725	3	208	220	440	1.6	.8	741BRW	PA	74142	---	---
910	STENCIL MACHINE	1.00	1725	1	115	230	---	4.0	2.0	H56C	RA	74664	---	---
910	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	---	4.3	-----	L56C	P	89385	---	---	
910	STENCIL MACHINE	1.50	1725	3	220	440	---	4.2	2.1	-----	PB	76100	---	---
910	MAIN CONVEYOR MOTOR	3.00	1800	3	208	416	---	11.4	5.7	-----	-----	23-25-4-3	VEV-SEV	74712
910	WIRE TYING MACHINE	-----	-----	3	220	440	---	2.7	-----	L56	P	75330	---	-----
913	BOX CONVEYOR DRIVE	.50	1725	3	200	---	1.6	8	-----	741BRW	PA	75330	---	-----
913	CONVEYOR	.50	1725	3	220	440	---	2.7	-----	L56	P	NONE	---	-----
913	LOWER BOX CONVEYOR	.50	1725	3	208	---	1.9	-----	63A	K	21332	---	---	
913	CONVEYOR DRIVE	.50	1725	3	208	---	2.7	-----	L56	P	NONE	---	---	
913	OVERHEAD CONVEYOR	.50	1725	3	200	---	2.7	-----	L56	P	NONE	---	---	
913	WEST OVERHEAD CONVEYOR	.50	1725	3	200	---	2.7	-----	L56	P	NONE	---	---	
913	FIBER CASE CONVEYOR	.50	1725	3	208	220	440	1.6	.8	-----	PA	74117	---	---
913	CONVEYOR DRIVE MOTOR	.50	1725	3	220	440	---	1.6	.8	F66	PA	74118	---	---
913	BLOWER MOTOR	.50	3450	1	115	230	---	7.0	3.5	56C	-----	K31B92B	---	---
913	GEARHEAD MOTOR	.75	1140	3	208	---	2.7	-----	203	PA	66145	---	---	
913	DIR-AIR PUMP MOTOR	.75	1725	1	115	230	---	10.8	5.4	56	-----	K670571	---	---
913	CONVEYOR (OWNER)	.75	1725	1	115	230	---	10.8	5.4	56	-----	K670593	---	---
913	CONVEYOR DRIVE	.75	1725	3	200	---	2.9	-----	M56	P	NONE	---	---	
913	CONVEYOR DRIVE MOTOR	.75	1725	3	208	---	5.3	-----	L56C	P	K670582	---	---	
913	CONVEYOR (UPPER)	.75	1725	1	115	230	---	10.8	5.4	56	-----	NONE	---	---
913	FIBER CONTAINER	.75	1725	3	208	---	5.3	-----	L56C	P	QZX	74829	---	
913	BOX CONVEYOR MOTOR	.75	1730	3	220	440	---	2.4	1.2	NA003	---	SESVCD	79389	---
913	W. CONVEYOR DRIVE	.75	1800	3	220	440	---	2.5	1.2	204-4-10	-----	K	NONE	---
913	CONVEYOR DRIVE	1.00	1120	3	220	440	---	3.1	1.6	203	-----	K	65532	---
913	CONVEYOR MOTOR	1.00	1120	3	220	440	---	3.1	1.6	203	-----	K	65530	---
913	FIBER CROSS CONVEYOR	1.00	1720	3	220	440	---	3.1	1.6	-----	-----	-----	-----	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	AN METER VOLTS	AN METER AMPS	AN HRS	AN COST	
913	CONVEYOR MOTOR	1.00	1725	3	208	6.0	L56C	P	NONE			
913	CHAIN CONVEYOR MOTOR	1.00	1725	3	220	4.40	N203	RL	74874			
913	CONDENSATE PUMP	1.00	1725	3	208	4.40	56	-----	89680			
913	CONVEYOR MOTOR	1.00	1725	3	220	4.40	3.4	-----				
913	CONVEYOR DRIVE MOTOR	1.00	1725	3	230	4.40	3.0	1.5	203RW	PB		
913	WAX CONVEYOR MOTOR	1.50	1730	3	208	3.0	3.0	1.5	203RW	PB	75333	
913	CONVEYOR DRIVE CONVEYOR	1.50	1730	3	208	3.0	7.5	-----	145TO	P		
913	BOX TRANS. CONVEYOR	1.50	1730	3	208	3.0	7.8	-----	145TO	P		
913	STENCIL MACHINE CONV	1.50	1730	3	208	3.0	7.8	-----	145TO	P		
913	CONVEYOR DRIVE MOTOR	2.00	1725	3	220	4.40	6.5	-----	145	P		
913	STENCIL MACHINE	2.00	1740	3	208	220	440	5.2	2.6	224RC	P8	
913	WIRE TIE DRIVE MOTOR	3.00	1725	3	220	440	5.8	2.9	184	PFU3	NONE	
913	WIRE TIE DRIVE MOTOR	3.00	1765	3	220	440	8.0	4.0	225	TGB-BE	114534	
913	VARIABLE SPEED CONVY	3.00	1800	3	220	440	9.6	4.8	225	EIRX	NONE	
913	CONVEYOR DRIVE CONVY	5.00	1740	3	208	220	440	11.9	11.3	5.7		
913	CONVEYOR DRIVE MOTOR	5.00	1740	3	208	220	440	14.6	14.2	7.1	184T	
913	CONVEYOR MOTOR	5.00	1800	3	208	416	18.4	9.2	-----	184T	P	
913	CONVEYOR MOTOR	5.00	1800	3	208	416	18.4	9.2	-----	23254-4-3	VEV-SEV	
913	CONVEYOR DRIVE MOTOR	5.00	1800	3	208	416	18.4	9.2	-----	23254-4-4	VEV-SEV	
913	VACUUM PUMP MOTOR	5.00	3475	3	220	440	18.4	9.2	-----	23254-4-3C	VEV-SER	
913	VACUUM PUMP MOTOR	5.00	3475	3	220	440	13.0	6.5	225	JES	79488	
913	CONVEYOR DRIVE MOTOR	7.50	1715	3	208	220	440	13.0	6.5	225	JES	71585
913	CONVEYOR DRIVE MOTOR	7.50	1755	3	208	220	440	21.0	-----	254U	K	
913	CONVEYOR MOTOR	7.50	1725	3	208	220	440	5.3	-----	254U	K	
913	BOX CONVY TO STENCIL	-----	1725	3	208	220	440	3.4	1.7	254U	K	
913	OVERHEAD CONVEYOR	-----	1725	3	208	220	440	3.4	1.7	254U	K	
913	CONVEYOR MOTOR	-----	1725	3	200	-----	2.3	-----	M4BY	P		
913	CONVEYOR MOTOR	-----	1725	3	208	220	440	3.4	1.7	P56C	P	
915	GRINDER MOTOR	.50	1725	3	208	220	440	2.0	1.0	4620M	-----	
915	DRILL PRESS	.50	1725	3	208	-----	1.9	-----	63A	K	96933	
915	CONVEYOR MOTOR	.50	1725	3	208	-----	4.0	-----	56	K	75544	
915	BAND SAW MOTOR	.75	1725	3	208	220	440	2.6	1.3	56	P	NONE
915	CONDENSATE MOTOR	1.50	1740	3	220	440	4.2	2.1	RS204	G7E	64005	
915	SPENCER VACUUM MOTOR	5.00	3500	3	208	-----	15.8	-----	184T	K	95860	
915	SPENCER VACUUM MOTOR	5.00	3500	3	208	-----	15.8	-----	184T	K	95858	
915	CONVEYOR MOTOR	-----	1725	3	200	-----	2.3	-----	M4BY	P	NONE	
915	CONVEYOR MOTOR	-----	1725	3	208	-----	2.3	-----	M4BY	P	NONE	
917	FAN HEATER BLOWER	1.00	1740	3	208	-----	3.3	-----	204	OS	41203	
917	WINDOW EXHAUST DRIVE	1.50	1725	1	115	230	-----	18.4	9.2	184	KC	NONE
917	CONDENSATE MOTOR	1.50	1740	1	220	440	4.2	2.1	204RS	Q2E	64006	
917	OSMEFAN	-----	-----	1	110	-----	.6	-----	-----	-----	NONE	
918	CONDENSATE PUMP	.50	1440	3	208	416	1.7	1.6	-----	-----	NONE	
918	AIR HANDLER BLOWER	1.00	1740	3	208	-----	3.3	-----	204	OS	41214	
918	OSMEFAN	-----	-----	1	110	-----	.6	-----	-----	-----	NONE	
920	FAN MOTOR	.33	1725	1	115	230	5.6	2.8	-----	-----	NONE	
920	HEATER FAN MOTOR #2	.50	1140	1	115	230	9.4	4.7	56	R	NONE	
920	HEATER FAN MOTOR #1	.50	1140	1	115	230	9.4	4.7	56	K	NONE	
920	HEATER FAN MOTOR #9	.50	1140	1	115	230	9.4	4.7	56	K	NONE	
920	HEATER FAN MOTOR #3	.50	1140	1	115	230	9.4	4.7	56	R	NONE	
920	HEATER FAN MOTOR #6	.50	1140	1	115	230	9.4	4.7	56	K	NONE	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
920	HEATER FAN MOTOR #7	.50	1140	1	115	230	9.4	4.7	56	K	None	---	---	---	
920	HEATER FAN MOTOR #8	.50	1140	1	115	230	9.4	4.7	56	K	None	---	---	---	
920	HEATER FAN MOTOR #4	.50	1140	1	115	230	9.4	4.7	56	R	None	---	---	---	
920	HEATER FAN MOTOR #5	.50	1140	1	115	230	9.4	4.7	56	K	None	---	---	---	
920	MOTOR	.75	1150	3	440	90.0	2.4	1.2	A66	-----	7554.1	-----	-----	-----	
920	CONDENSATE PUMP	.75	1735	3	220	440	2.4	1.2	215	P	6926.9	-----	-----	-----	
920	EXHAUST FAN	5.00	1745	3	208	440	15.2	14.4	7.2	-----	90499	-----	-----	-----	
920	BATTERY CHARGER #5	-----	-----	3	220	440	520.	471.	-----	-----	64744	-----	-----	-----	
920	EXIDE ELECT TRK REC	-----	-----	3	220	440	36.8	16.4	-----	-----	None	-----	-----	-----	
920	BATTERY CHARGER #1	-----	-----	3	220	440	470.	421.	-----	-----	N-1-A	6884.6	-----	-----	
921	VACUUM PRODUCER	10.00	3500	3	220	440	26.0	13.0	284	JEX	76137	-----	-----	-----	
923	VACUUM PRODUCER	10.00	3520	3	220	440	26.0	13.0	284	JEX	35874	-----	-----	-----	
926	CONDENSATE PUMP	.75	1725	1	115	230	10.8	5.4	-----	-----	None	-----	-----	-----	
927	ELEVATOR MOTOR	.50	1750	3	208	416	1.6	.8	81	SC	76746	-----	-----	-----	
929	EXHAUSTER DRIVE	5.00	1000	3	208	440	18.0	8.0	284	AE	75539	-----	-----	-----	
930	PUMP MOTOR	2.00	3525	3	200	440	55.0	25.0	256T	CE4B	None	-----	-----	-----	
930	COOLING TOWER FAN	2.50	3450	3	230	460	5.3	2.9	-----	TS	95958	-----	-----	-----	
930	AIR COMPRESSOR MOTOR	50.00	1175	3	220	440	3.2	1.4	145T	-----	None	-----	-----	-----	
930	AIR COMPRESSOR MOTOR	75.00	1180	3	220	440	126.	63.0	504	CS	02205	-----	-----	-----	
931	COOLING COMPRESSOR	1.50	1750	3	208	220	440	93.0	607	-----	02204	-----	-----	-----	
951	FAN FOR COOL TOWER	3.00	1750	3	220	440	4.8	2.4	184	RT 1	88564	-----	-----	-----	
951	VACUUM UNIT MOTOR	5.00	3475	3	220	440	9.0	4.5	225	HPZZ	76127	-----	-----	-----	
951	REFRIG COMPRESSOR	-----	-----	3	220	440	13.0	6.5	225	JES	45627	208	13.0	-----	
997	EXHAUST FAN DRIVE	.75	-----	1	115	-----	9.1	-----	-----	-----	46095	-----	-----	-----	
997	AIR DRYER - FAN	1.00	1075	1	460	-----	3.3	-----	-----	US	95397	-----	-----	-----	
997	AIR DRYER-COMPRESSOR	-----	-----	3	460	-----	23.0	-----	-----	F	None	-----	-----	-----	
997	AIR COMPRESSOR MOTOR	125.0	870	3	440	-----	154.	-----	154.	-----	74833	-----	-----	-----	
997	DRIVE MOTOR SPECIAL	125.0	870	3	440	-----	154.	-----	-----	SPECIAL	SC-6800Y	74711	-----	-----	-----

APPENDIX D

INACTIVE MOTORS SORTED BY LOCATION AND BY HORSEPOWER RATING AT EACH LOCATION -
BUILDING NUMBERS ABOVE 1000

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1002	CHEMICAL PUMP	.33	-----	1	115	230	---	56	-----	-----	-----	-----	-----	-----
1002	#2 FUEL OIL PUMP	.75	1425	3	208	220	440	F56	PF	-----	-----	-----	-----	-----
1002	#1 FUEL OIL PUMP	.75	1725	3	208	220	440	F56	PF	-----	-----	-----	-----	-----
1002	OIL PUMP	5.00	1745	3	208	-----	15.6	184T	K	845405	-----	-----	-----	-----
1002	STACK FAN MOTOR #1	5.00	1750	3	208	-----	14.4	-----	05	02263	-----	-----	-----	-----
1002	STACK FAN BOILER #2	5.00	1750	3	208	-----	14.4	-----	254	08	00521	-----	-----	-----
1002	BLOWER MOTOR	7.50	1800	3	200	-----	22.4	-----	A001200	COSO	-----	-----	-----	-----
1002	BLOWER #3 BOILER	7.50	1800	3	200	-----	21.2	-----	AFO-1200	COSO	-----	-----	-----	-----
1002	#2 BOILER MOTOR	7.50	1800	3	208	-----	21.2	-----	AFO-1200	COSO	-----	-----	-----	-----
1002	STACK FAN BOILER #3	15.00	1445	3	208	-----	18.5	14.6	254	K	05071	-----	-----	-----
1002	BOILER FEED WATER #3	15.00	3515	3	200	-----	42.7	-----	254T	-----	-----	-----	-----	-----
1002	BOILER FEED WATER #1	15.00	3515	3	200	-----	42.7	-----	254T	-----	-----	-----	-----	-----
1002	BOILER FEED WATER #2	15.00	3515	3	200	-----	42.7	-----	254T	-----	-----	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	725B09	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	J725B11	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	J725B13	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	J725B09	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	J725B08	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	J725B12	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	725B12	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	725B13	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	725B11	-----	-----	-----
1003	OVERHEAD DOOR DRIVE	.33	1725	1	115	-----	6.2	-----	56C	-----	725B08	-----	-----	-----
1003	OVERHEAD HEATER	.50	1075	1	115	230	---	5.8	2.9	K56	CC	-----	-----	-----
1003	OH HEATER FAN #1	.50	1075	1	115	230	---	5.8	2.9	K56	CC	-----	-----	-----
1003	OVERHEAD HEATER FAN	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OH HEATER FAN #4	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OH HEATER FAN #9	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OH HEATER FAN #8	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OVERHEAD HEATER FAN	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OVERHEAD HEATER FAN	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OH HEATER FAN #2	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OVERHEAD HEATER FAN	.50	1140	1	115	230	---	8.4	4.2	L56	CS	-----	-----	-----
1003	OH HEATER FAN #5	.50	1725	1	115	230	---	6.3	-----	XD186Y	-----	45799	-----	-----
1003	HEATER FAN MOTOR	.50	1725	1	110	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	HEATER FAN MOTOR #3	.50	1725	1	110	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	OH HEATER FAN #6	.50	1725	1	110	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	OVERHEAD HEATER FAN	.50	1725	1	115	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	OVERHEAD HEATER	.50	1725	1	110	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	OH HEATER FAN #7	.50	1725	1	110	-----	6.3	-----	XD186Y	FH	45801	-----	-----	-----
1003	SUMP PIT CONDENSATE	.75	3450	3	208	220	440	2.5	1.3	G56	PFU3	98902	-----	-----
1003	CONDENSATE MOTOR	.75	3450	3	208	220	440	2.5	1.3	G56	PFU3	K890082	-----	-----
1003	STACK VENT FAN MOTOR	7.50	1755	3	230	460	---	19.8	9.9	213T	K	K845893	-----	-----
1003	STACK VENT FAN MOTOR	7.50	1755	3	230	460	---	19.8	9.9	213T	K	845893	-----	-----
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	-----	29.4	-----	-----	-----	CF4B	-----	-----	-----
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	-----	29.4	-----	-----	-----	CF4B	-----	-----	-----
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	-----	29.4	-----	-----	-----	CE4B	-----	-----	-----
1003	EXHAUST FAN MOTOR	10.00	1735	3	220	-----	29.4	-----	-----	-----	CE4B	-----	-----	-----
1005	HEATER FAN	.33	1140	1	115	-----	6.0	-----	KE56	-----	-----	-----	-----	-----
1005	HEATER FAN	.33	1140	1	115	-----	6.0	-----	KE56	K56	-----	-----	-----	-----

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	---	6.2	---	J725B10	---	---	---	---	---
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	---	6.2	---	V725B14	---	---	---	---	---
1005	PAINT SHAKER	.33	1725	1	115	230	6.4	3.2	128165	---	---	---	---	---
1005	OVERHEAD DOOR MOTOR	.33	1725	1	115	---	6.2	---	725B07	---	---	---	---	---
1005	BANDING MACHINE	.33	1800	1	230	---	4.6	---	56-4206E	---	---	---	---	---
1005	CONV. DRIVE MOTOR	.50	1725	3	208	220	440	2.1	2.0	1.0	55C-513M	---	---	---
1005	DELUGE COMPRESSOR	.50	1725	1	115	230	6.6	3.3	35	70143	---	---	---	---
1005	BAND SAW KALAMAZOO	.50	1725	1	115	---	8.2	---	56	F2	---	---	---	---
1005	THREADING MACHINE	.50	6000	1	115	---	8.0	---	B6038	---	---	---	---	---
1005	CONVEY FEED TO OVEN	.75	---	3	208	220	440	2.4	1.2	---	7420NRW	PA	70886	---
1005	REEVES VARI REPLACE	1.00	1725	3	208	220	440	6.3	---	L56C	P	96640	---	---
1005	PUMP DRIVE	1.00	1725	3	208	220	440	3.6	1.8	M-SGC	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	200	---	6.3	---	L56C	P	96641	---	---	---
1005	VERTICAL BELT SANDER	1.00	1725	3	208	---	3.6	---	516M	91095	---	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	200	---	6.3	---	L56C	P	96640	---	---	---
1005	REEVES VARI REPLACE	1.00	1725	3	200	---	6.3	---	L56C	P	96641	---	---	---
1005	CONVEYOR DRIVE MOTOR	1.00	1730	3	208	220	440	4.3	2.2	143T	P	J478959	---	---
1005	DRILL PRESS MOTOR	1.50	1140	3	208	---	---	---	EGGY	TDR-BZ	---	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	200	---	8.0	---	P56CZ	P	96652	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	200	---	8.0	---	P56CZ	P	96652	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	200	---	8.0	---	P56CZ	P	96651	---	---	---
1005	DRILL PRESS MOTOR	2.00	1140	3	200	---	8.0	---	P56CZ	P	96651	---	---	---
1005	REEVES VARI REPLACE	1.50	1725	3	200	---	8.0	---	P56CZ	P	96651	---	---	---
1005	CONVEYOR DRIVE	1.50	1735	3	208	440	---	5.8	2.9	143T	---	---	---	---
1005	OVEN DRIVE MOTOR	1.50	1735	3	230	460	---	5.0	2.5	145T	---	---	---	---
1005	SPARE F/OVEN IN 1005	1.50	1740	3	230	460	---	5.0	2.5	145T	---	RG	---	---
1005	COOL TWR CIRCULATING	1.50	1745	3	230	460	---	5.0	2.5	145T	SL	49	---	---
1005	DRILL PRESS MOTOR	2.00	1140	3	220	440	---	6.4	3.2	225	K	90930	---	---
1005	REEVES VARI REPLACE	2.00	1725	3	200	---	8.2	---	145T	P	96658	---	---	---
1005	REEVES VARI REPLACE	2.00	1725	3	200	---	8.2	---	145T	P	96658	---	---	---
1005	OVERHEAD HEATER	2.00	1750	3	208	---	5.8	---	225	OS	41220	---	---	---
1005	OVERHEAD HEATER	2.00	1750	3	208	---	5.8	---	225	OS	41220	---	---	---
1005	GRINDER MOTOR	3.00	1725	3	208	220	440	7.4	3.7	56X	B	None	---	---
1005	METAL CUT OFF SAW	3.00	3450	3	208	440	---	7.6	3.7	184T	TDR-BE	None	---	---
1005	AIR HANDLER MOTOR	5.00	1745	3	230	460	---	13.2	6.6	184T	TDR-BE	None	---	---
1005	CONDENSER FAN MOTOR	5.00	1745	3	230	460	---	13.2	6.6	184T	TDR-BE	76237	---	---
1005	SUMP PUMP	---	1735	3	208	---	1.6	---	---	---	---	91076	---	---
1005	CIRCULATING PUMP	---	---	3	---	---	---	---	---	404T-18	R	None	---	---
1005	WORTHING AIR COMPRES	100.0	1750	3	230	460	---	245.	122.	---	---	---	---	---
1006	HEATER FAN MOTOR	.33	1140	1	115	---	6.0	---	K56	SP	---	---	---	---
1006	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	---	1.8	1.0	.9	656	P	J500293	---
1006	HEATER PUMP DRIVE	.50	1725	3	200	---	2.9	---	56C	E	---	K765214	---	---
1006	HEATER PUMP DRIVE	.50	1745	3	208	240	---	4.2	4.0	143T	SC	J542313	---	---
1006	CONDENSATE PUMP	.75	3450	3	208	220	440	2.4	1.3	56	---	J976475	---	---
1006	HOT WTR CIRCULATING	1.00	1735	3	200	---	4.3	---	143T	CE4B	---	SL91076	---	---
1006	RED WATER PUMP CROSS	1.00	1735	3	200	---	4.3	---	143T	CE4B	---	None	---	---
1006	HOT WTR CIRCULATING	1.00	1745	3	200	---	2.9	---	56C	SC	---	None	---	---
1006	INCLINE CAN. MOTOR	1.50	1725	3	230	460	---	5.6	2.8	145T	3	SN43378	---	---
1006	CIRCULATING PUMP	2.00	1735	3	200	---	7.4	---	145T	L	SN48378	---	---	---
1006	CIRCULATING PUMP	2.00	1735	3	200	---	.4	---	145T	TDR-BE	None	---	---	---
1006	CONDENSER MOTOR	2.00	1735	3	230	460	---	6.0	3.0	145T	---	---	---	---
1006	AIR HANDLER MOTOR	3.00	1730	3	240	280	---	9.4	4.7	182T	---	---	---	---
1006	ROTO-CLOSE BLOWER	3.00	1740	3	220	440	---	9.0	4.5	225	APPZZ	K765214	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
1006	FAN MOTOR	3.00	1740	3	220	4.5	.9	225	AP ZZ	65421	-----	-----	-----	-----		
1006	FAN MOTOR	3.00	3500	3	208	10.2	-----	182T	K	J796164	-----	-----	-----	-----		
1006	ELEVATOR MOTOR	5.00	10000	3	208	18.0	-----	284	-----	79466	-----	-----	-----	-----		
1006	ELEVATOR DRIVE MOTOR	5.00	10000	3	208	18.0	-----	284	-----	79465	-----	-----	-----	-----		
1006	ELEVATOR DRIVE MOTOR	5.00	10000	3	208	18.0	-----	284	-----	79465	-----	-----	-----	-----		
1006	CENTER KETTLE DRIVE	5.00	11730	3	208	14.7	-----	254	-----	09662	-----	-----	-----	-----		
1006	EXHAUST FAN MOTOR	5.00	1740	3	220	440	14.0*	7.0	254	AP ZZ	65415	-----	-----	-----	-----	
1006	ROTO-CLONE BLOWER	5.00	1740	3	230	460	13.0	6.5	184T	R622	K654464	-----	-----	-----	-----	
1006	ROTO-CLONE BLOWER	5.00	1740	3	220	440	12.8	6.4	254	EK	69189	-----	-----	-----	-----	
1006	ROTO-CLONE BLOWER	5.00	1740	3	220	440	12.8	6.4	254	SC	70675	-----	-----	-----	-----	
1006	EXHAUST FAN MOTOR	5.00	1740	3	220	440	14.0	7.0	254	-----	65417	-----	-----	-----	-----	
1006	CONVEYOR DRIVE MOTOR	5.00	1740	3	220	440	14.2	7.1	184T	CE4B	362525	-----	-----	-----	-----	
1006	ROTO-CLONE BLOWER	5.00	1745	3	208	220	440	15.0	14.4	7.2	184T	CE4B	K362523	-----	-----	
1006	ROTO-CLONE BLOWER	5.00	1745	3	208	220	440	15.0	14.4	7.2	215T	CE4B	J507892	-----	-----	
1006	NORTH KETTLE MOTOR	10.00	1735	3	208	220	440	26.6	13.3	324	K	44562	-----	-----	-----	-----
1006	SOUTH KETTLE DRIVE	10.00	1745	3	208	220	440	27.6	13.3	204	K	76709	-----	-----	-----	-----
1010	DRILL PRESS MOTOR	1.00	1130	3	220	440	-----	3.4	1.7	6228M	S11864	NONE	-----	-----	-----	-----
1010	GRINDER DRIVE MOTOR	3.00	1725	3	200	220	-----	7.4	3.7	-----	-----	-----	-----	-----	-----	-----
1011	POWER 90 DRIVE MOTOR	.33	1725	1	115	230	---	5.2	2.6	J56	CS	NONE	-----	-----	-----	-----
1011	POWER 90 CONVEYOR	.33	1725	1	115	230	---	6.2	3.1	56C	-----	K6205352	-----	-----	-----	-----
1011	BAND CUTTER MOTOR	.33	1800	1	115	230	---	4.6	2.3	56-4206E	-----	NONE	-----	-----	-----	-----
1011	INCLINE CONVEYOR	.50	1725	3	208	220	440	2.0	1.0	NK143TC	-----	J577036	-----	-----	-----	-----
1011	INCLINE TO S. ALTERN	.50	1725	3	208	220	---	2.2	1.0	NK143TC	-----	7430671	-----	-----	-----	-----
1011	FIBER CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M484	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M484	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	440	1.8	.9	K56	P	NONE	-----	-----	-----	-----
1011	CUP CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M48Y	P	NONE	-----	-----	-----	-----
1011	MTR ON SPR BOX CLOSE	.50	1725	3	230	230	---	2.0	1.0	56C416M	-----	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M49Y	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M48V	P	NONE	-----	-----	-----	-----
1011	STEEL CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	K56	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.50	1725	3	200	200	---	2.4	1.0	M48Y	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE MOTOR	.50	1725	3	208	220	440	1.8	.9	M48Y	P	NONE	-----	-----	-----	-----
1011	CHAIN ON BOX CLOSER	.50	1725	3	230	240	---	2.0	1.0	56C-416M	-----	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE MOTOR	.50	1730	3	208	220	440	5.8	1.4	145T	P	J479465	-----	-----	-----	-----
1011	FIBER GROSS FEED CON	.50	1750	3	220	440	---	8.4	4.2	L56	FB	NONE	-----	-----	-----	-----
1011	HEATER FAN DRIVE	.50	-----	1	115	230	---	2.2	1.1	L56	CS	NONE	-----	-----	-----	-----
1011	BOX CLOSER CONVEYOR	.75	1725	3	220	440	---	2.6	1.3	56C 520M	-----	NONE	-----	-----	-----	-----
1011	FAN DRIVE	.75	1725	3	208	208	---	2.8	1.4	G56	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.75	1725	3	208	220	440	2.6	1.3	L56	P	J501335	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.75	1725	3	230	460	---	2.1	1.0	LA56C	-----	NONE	-----	19	-----	-----
1011	CONVEYOR MOTOR	.75	1725	3	208	220	440	2.6	1.3	M56	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.75	1725	3	200	200	---	2.1	1.0	LA56C	SC	NONE	-----	-----	-----	-----
1011	BOX CONVEYOR DRIVE	.75	1725	3	208	440	---	4.0	1.4	K56	P	5901906	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.75	1725	3	208	220	440	3.4	1.2	56	P	NONE	-----	-----	-----	-----
1011	CONVEYOR DRIVE	.75	1725	3	208	220	440	3.4	1.2	56	P	NONE	-----	-----	-----	-----
1011	BOX CONVEYOR MOTOR	1.00	1125	3	208	220	440	5.8	1.9	56	P	NONE	-----	-----	-----	-----
1011	VACUUM PUMP MOTOR	1.00	1125	3	208	220	440	3.4	1.2	56	P	NONE	-----	-----	-----	-----
1011	VACUUM PUMP MOTOR	1.00	1125	3	208	220	440	3.4	1.2	56	P	NONE	-----	-----	-----	-----
1011	FAN DRIVE MOTOR	1.00	1140	1	1140	-----	-----	5.8	2.9	56	-----	K555527	-----	-----	-----	-----

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
1011	INCOM CANISTER BELT	1.00	1200	3	220	440	8.4	4.8	13-244-4	VE-SESV	74774	---	---	---	
1011	INCLINE CONVEYOR	1.00	1725	3	200	---	3.0	---	KA56CZ	SC	NONE	---	---	---	
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	200	---	3.4	---	56 520M	P	NONE	---	---	---	
1011	CONVEYOR DRIVE	1.00	1725	3	200	---	4.7	---	L56	P	NONE	---	---	---	
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	200	---	3.4	---	56 520	P	NONE	---	---	---	
1011	CONVEYOR DRIVE	1.00	1725	3	230	---	4.1	---	L56	P	NONE	---	---	---	
1011	MAIN DRIVE-BOX STAPL	1.00	1725	3	200	220	440	3.4	3.2	1.6	56 520M	---	53	---	
1011	CROSS FEED CONVEYOR	1.00	1730	3	220	440	3.0	1.5	NA203	QZX	65425	---	---	---	
1011	MAIN CONVEYOR MOTOR	1.00	1730	3	200	220	440	4.3	2.2	143T	P	J479544	---	---	---
1011	HYDRAULIC PUMP DRIVE	1.00	3450	3	200	---	3.4	---	56C 513M	P	NONE	---	---	---	
1011	HYDRAULIC PUMP MOTOR	1.00	3450	3	200	---	3.4	---	56C513M	P	NONE	---	---	---	
1011	HYDRAULIC PUMP DRIVE	1.00	3450	3	200	220	440	3.4	3.2	1.6	56C 513M	---	8	---	
1011	CONVEYOR DRIVE	1.00	---	3	200	---	4.7	---	L56	P	NONE	---	---	---	
1011	S METRO DRIVE MOTOR	1.50	1125	3	200	---	4.6	---	184	---	---	---	---	---	
1011	BOX STENCIL MACHINE	1.50	1140	3	200	220	440	5.0	2.5	PM184	---	623571	---	---	---
1011	STITCHER DRIVE	1.50	1725	3	230	---	4.2	---	145TC	---	---	---	---	---	
1011	STITCHER DRIVE	1.50	1725	3	200	---	4.2	---	14TE-524M	---	---	---	---	---	
1011	CONVEYOR DRIVE MOTOR	1.50	1725	3	200	---	6.0	---	R56CZ	P	---	---	---	---	
1011	PORTABLE CONVEYOR	1.50	1725	3	200	---	7.8	---	P56CZ	P	K324372	---	---	---	
1011	N METRO MAIN DRIVE	1.50	1725	3	200	220	440	4.6	2.1	184 817M	---	KB64261	---	---	---
1011	CONVEYOR DRIVE MOTOR	1.50	1725	3	200	---	8.0	---	P56CF	P	---	---	---	---	
1011	MAIN CONVEY SO. SIDE.	1.50	1725	3	200	---	7.8	---	P56CZ	P	96141	---	---	---	
1011	STITCHER DRIVE	1.50	1725	3	200	---	4.2	---	145TC	524	---	---	---	---	
1011	CONVEYOR DRIVE	1.50	1730	3	200	---	5.8	---	145T	P	---	---	---	---	
1011	SOUTH INCLINE DRIVE	1.50	1730	3	200	220	440	5.8	2.9	145	P	J479466	---	---	---
1011	FIBER CONVEYOR	1.50	1750	3	200	220	440	5.8	2.9	145T	P	---	---	---	---
1011	MAIN DRV ON STENCIL	2.00	1740	3	200	---	5.9	---	H184	PFU3	M277272	---	---	---	---
1011	CHAIN ON BOX CLOSER	3.00	1725	3	230	---	2.0	---	56C-416M	---	3	---	---	---	
1011	CROSS CONVEYOR DRIVE	3.00	1725	3	---	4.4	2.2	145TC	---	J305805	---	---	---	---	
1011	CONVEYOR DRIVE	3.00	1730	3	200	---	6.5	---	145T	P	---	---	---	---	
1011	CONVEYOR DRIVE	3.00	1800	3	200	---	2.4	---	M4B V	P	74713	---	---	---	
1011	CONVEYOR DRIVE MOTOR	5.00	1730	3	200	---	18.1	---	PFU3	---	---	---	---	---	
1011	CONVEYOR DRIVE MOTOR	5.00	1800	3	200	220	440	18.9	---	56C-416M	---	3	---	---	---
1011	VACUUM PUMP DRIVE	7.50	1735	3	220	---	4.4	2.2	145TC	---	J305805	---	---	---	
1011	CONVEYOR DRIVE MOTOR	10.00	1800	3	200	400	---	21.0	---	56C-416M	---	3	---	---	---
1011	WIRE TIER - PUMP	10.00	1800	3	200	400	29.0	14.5	21ST	IKH	NONE	---	---	---	
1011	HYDRAULIC PUMP MOTOR	10.00	1800	3	200	400	29.0	14.5	23-225-4-	VEVS EV	NONE	---	---	---	
1011	WIRE TIER - PUMP	10.00	1800	3	200	400	29.0	14.5	23-225-4-	VEVS EV	NONE	---	---	---	
1014	WINDOW FAN MOTOR	.75	1725	3	200	220	440	29.0	14.5	56	---	12074	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	200	220	440	3.0	1.5	56	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	200	220	440	3.0	1.5	56	---	---	---	---	---
1014	WINDOW FAN MOTOR	.75	1725	3	200	220	440	3.0	1.5	56	---	---	---	---	---
1014	AIR HANDLER FAN	1.50	1730	3	220	440	4.8	2.4	204	APT	60881	---	---	---	---
1014	AIR HANDLER FAN	1.50	1730	3	220	440	4.8	2.4	204	APT	60881	---	---	---	---
1015	EXHAUST FAN	.75	1725	3	200	440	3.0	1.5	56MB	---	NONE	---	---	---	---
1015	FAN MOTOR	.75	1725	3	200	440	3.0	1.5	56-M6	---	NONE	---	---	---	---
1015	CONDENSATE PUMP	.75	3450	3	200	---	4.5	2.3	204	K	66415	---	---	---	---
1017	BLOWER FOR HEATER	1.50	1730	3	200	440	4.5	2.3	204	K	66415	---	---	---	---
1017	CONVEYOR DRIVE MOTOR	.50	1725	3	200	220	440	1.2	.9	---	---	J500043	---	---	---
1017	POWER TO CONVEYOR	.50	1725	3	200	220	440	1.8	.9	K56	P	J501402	---	---	---
1017	CONDENSATE PUMP	.75	3450	3	200	230	460	1.8	.9	K56	A	J500045	---	---	---
												96563	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1017	CONVEYOR DRIVE	1.00	1730	3	208	440	4.3	2.2	143T	-----	J478958	-----	-----	-----
1017	CONVEYOR DRIVE	1.00	1730	3	208	440	4.3	2.2	203	EIS	J478957	-----	-----	-----
1017	CIRCULATING PUMP	1.00	1740	3	208	416	3.4	1.7	203	EIX	41955	-----	-----	-----
1017	PUMP MOTOR	1.00	1740	3	208	-----	3.6	-----	203	-----	66475	-----	-----	-----
1017	TNT SHAKER MOTOR	3.00	860	3	208	-----	10.6	-----	284	HP	02784	-----	-----	-----
1017	TNT SHAKER DRIVE	3.00	870	3	208	-----	10.4	-----	-----	-----	09953	-----	-----	-----
1017	ELEVATOR MOTOR	5.00	1000	3	208	-----	18.0	-----	-----	-----	-----	-----	-----	-----
1017	TNT SHAKER MOTOR	5.00	1730	3	220	440	13.9	7.0	-----	-----	SA67175	-----	-----	-----
1017	EXHAUST VENT DRIVE	5.00	1740	3	220	440	12.8	6.4	-----	-----	69771	-----	-----	-----
1018	FAN DRIVE MOTOR	1.00	1075	3	460	-----	3.3	-----	48	UF	-----	-----	-----	-----
1018	COOL TWR CIRCULATING	2.00	3450	3	440	-----	2.9	-----	56-10	TS	95959	-----	-----	-----
1018	FAN DRIVE	2.50	1710	3	460	-----	3.2	1.4	145T	K	NONE	-----	-----	-----
1018	COMPRESSOR ON DRYER	-----	-----	3	460	-----	19.0	-----	-----	F	NONE	-----	-----	-----
1018	AIR COMPRESSOR	200.0	300	3	-----	-----	212.	-----	-----	-----	76695	-----	-----	-----
1019	AUTO SCALES CONVEYOR	.33	1725	1	115	230	5.6	2.8	56C	P	09041	-----	-----	-----
1019	SCALE CONVEYOR DRIVE	.33	1725	1	115	230	5.6	2.8	56C	P	FH51578	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	.33	1725	3	220	440	1.6	0.8	F56	PSC	74645	-----	-----	-----
1019	CONDENSER FAN MOTOR	.50	825	1	208	230	2.9	-----	-----	-----	NONE	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	.50	1725	3	208	230	1.8	0.9	K56	P	J501408	-----	-----	-----
1019	STENCIL MACHINE	.50	1725	1	230	460	2.2	1.1	-----	L56C	K583456	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	.50	1725	3	200	-----	2.7	-----	K56	P	L636498	-----	-----	-----
1019	CONVEYOR MOTOR	.50	1725	3	208	220	440	2.3	1.2	M48Y	P	NONE	-----	-----
1019	CONVEYOR DRIVE MOTOR	.75	1725	3	200	-----	5.3	-----	-----	L56C	P	M875094	-----	-----
1019	MARKER DRIVE MOTOR	.75	1725	3	208	220	440	2.6	1.3	256C	P	H09176	-----	-----
1019	CONVEYOR DRIVE MOTOR	.75	1800	3	208	-----	3.9	-----	656-5	-----	WAVEFGD	J74749	-----	-----
1019	CONDENSESTE PUMP DRIVE	.75	3450	3	208	220	440	2.5	1.3	656	PFU3	L711964	-----	-----
1019	CONVEYOR MOTOR	1.00	1130	3	208	-----	3.6	-----	204	K	71534	-----	-----	-----
1019	X-OMAT BLOWER MOTOR	1.00	1725	1	115	230	12.0	6.0	-----	-----	090915	-----	-----	-----
1019	CONVEYOR - NO. LINE	1.00	1725	3	208	-----	6.0	-----	L56G	P	NONE	-----	-----	-----
1019	X-OMAT BLOWER MOTOR	1.00	1725	1	115	230	12.0	6.0	-----	-----	087492	-----	-----	-----
1019	DISCHRG & LOAD CONVE	1.00	1725	3	200	-----	4.7	-----	L56	P	96139	-----	-----	-----
1019	HEATER-A/C FAN MOTOR	1.00	1730	3	208	220	440	2.9	1.4	-----	J417687	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	1.00	-----	3	200	-----	4.7	-----	L56	P	L602583	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	1.50	1730	3	208	220	440	5.3	4.9	EN	500569	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	2.00	1745	3	208	220	440	7.4	3.5	AEX	NONE	-----	-----	-----
1019	VACUM PRODUCER	5.00	3500	3	200	-----	15.8	-----	184T	K	B04361	-----	-----	-----
1019	HYDRAULIC PUMP MOTOR	7.50	1750	3	230	-----	20.8	-----	-----	K	M803365	-----	-----	-----
1019	CONVEYOR DRIVE MOTOR	7.50	1755	3	208	-----	21.0	-----	213T	-----	NONE	-----	-----	-----
1019	LOWER DRIVE MOTOR	7.50	1755	3	208	-----	21.0	-----	254U	K	601592	-----	-----	-----
1019	SOUTH CONVEYOR DRIVE	7.50	1755	3	208	-----	21.0	-----	254U	K	L601594	-----	-----	-----
1019	UPPER DRIVE MOTOR	7.50	1755	3	208	-----	21.0	-----	254U	K	L601586	-----	-----	-----
1019	VARI-DRIVE CONVEYOR	-----	-----	3	-----	-----	20.8	-----	-----	K	601588	-----	-----	-----
1019	VACUM PUMP MOTOR	10.00	3500	3	220	440	26.0	13.0	284	JEY	62929	-----	-----	-----
1019	VACUM DRIVE MOTOR	10.00	3530	3	220	440	27.0	13.5	254U	K	QB99872	-----	-----	-----
1019	HYDRAULIC PUMP MOTOR	15.00	-----	3	230	-----	41.0	-----	254T	L	NONE	-----	-----	-----
1025	AIR DRYER FAN	.50	1075	3	208	440	2.0	1.7	48	UF	NONE	-----	-----	-----
1025	COOLING TOWERS - FAN	.50	1725	3	208	440	1.8	.9	H-56	RP	091316	-----	-----	-----
1025	COMPRESSOR AIR DRYER	-----	-----	3	-----	-----	-----	-----	-----	-----	NONE	-----	-----	-----
1025	AIR COMPRESSOR DRIVE	250.0	585	3	460	-----	6343	-----	-----	SC	NONE	-----	-----	-----
1051	CONDENSER FAN MOTOR	.33	825	1	208	240	2.1	-----	48	-----	PSC	NONE	-----	-----
1051	CONDENSER FAN MOTOR	.33	825	1	208	240	2.0	-----	-----	-----	-----	-----	-----	-----

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE.	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
1051	CONDENSER FAN MOTOR	.33	825	1	208	240	2.1	SC	None	None	None	None	None	None	
1051	CONDENSER FAN #3	.33	825	1	208	240	2.1	48	None	None	None	None	None	None	
1051	CONDENSER FAN MOTOR	.33	-----	1	-----	-----	2.3	-----	-----	-----	-----	-----	-----	-----	
1051	CONDENSER FAN MOTOR	.33	-----	1	208	240	2.3	-----	-----	-----	-----	-----	-----	-----	
1051	AIR HANDLER MOTOR	3.00	3460	3	208	220	440	7.6	F66	TDR-BH	None	None	None	None	
1051	BLOWER AIR CONDITION	3.00	3460	3	208	220	440	7.6	F66	TDR-BH	None	None	None	None	
1055	CONVEYOR DRIVE	5.00	1800	3	220	440	-----	17.4	VC-D	VE	70962	-----	-----	-----	
1065	HEATER FAN	.33	1140	1	115	-----	6.0	-----	K56	SP	None	None	None	None	
1065	HEATER FAN	.33	1140	1	115	-----	6.0	-----	K56	SP	None	None	None	None	
1065	PRESS DISCHRG CONVEY	.33	1725	1	115	230	-----	4.8	2.4	-----	R56	CS	J494394	-----	
1065	HEATER FAN MOTOR	.33	1725	1	115	230	-----	5.6	2.8	-----	R56	CS	J729663	-----	
1065	HEATER FAN MOTOR	.33	1725	1	115	230	-----	4.8	2.4	-----	R56	CS	H431448	-----	
1065	CONVEYOR DRIVE	.50	1725	3	208	-----	2.1	-----	R56	CS	H431450	-----	-----	-----	
1065	LID PULLER MOTOR	.75	1725	3	200	-----	5.3	-----	L56C	P	L357111	-----	-----	-----	
1065	FAST LID PULLER	.75	1725	3	200	-----	5.3	-----	L56C	P	815355	-----	-----	-----	
1065	LID PULLER - S-WEST	.75	1725	3	240	-----	5.3	-----	L56C	P	None	None	None	None	
1065	FIBER CONVEYOR MOTOR	.75	1725	3	220	440	-----	2.3	1.1	-----	69682	-----	-----	-----	
1065	LID PULLER DRIVE	.75	1725	3	200	-----	5.3	-----	L56C	P	M875354	-----	-----	-----	
1065	LID PULLER DRIVE	.75	1725	3	200	-----	5.3	-----	L56C	P	875353	-----	-----	-----	
1065	W. LID PULL - S-WEST	.75	1725	3	240	-----	5.3	-----	L56C	P	J381324	-----	-----	-----	
1065	CONDENSATE RETURN	.75	3450	3	208	-----	2.5	-----	656	PFU3	FL71196	-----	-----	-----	
1065	HEATER FAN MOTOR	1.00	1725	1	115	230	-----	4.8	2.4	-----	R56	CS	None	None	
1065	BRASS CONVEYOR/E-W	1.00	1725	3	208	220	440	3.6	1.8	-----	M56	P	480015	-----	
1065	LAST DRIVE CONVEYOR	1.00	1725	3	230	-----	4.1	-----	L56	P	None	None	None	None	
1065	MOONEY PRESS DRIVE	1.00	1725	3	200	-----	6.3	-----	L56C	P	J738486	-----	-----	-----	
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	220	440	3.6	1.8	-----	M56	R	None	None	
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	220	440	3.6	1.8	-----	M56	P	J479255	-----	
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	200	-----	4.1	-----	L56	P	K329292	-----	-----	-----	
1065	PRESS FEED CONVEYOR	1.00	1725	3	208	220	440	3.6	1.8	-----	M56	P	J479259	-----	
1065	EAST OH CONVEYOR	1.00	1725	3	200	-----	6.3	-----	L56C	P	843753	-----	-----	-----	
1065	OVERHEAD CONVEYOR	1.00	1725	3	200	-----	6.3	-----	L56C	P	M843656	-----	-----	-----	
1065	BRASS PRIM FEED CONV	1.00	1725	3	208	220	440	3.6	1.8	-----	M56	P	SJ47925	-----	
1065	CONVEY FOR PRIM PRES	1.00	1725	3	230	460	-----	4.1	-----	L56	P	SM86603	-----	-----	-----
1065	2 DRV ON CONV PRIMER	1.00	1725	3	230	-----	4.1	-----	L56	P	M867312	-----	-----	-----	
1065	FIBER CONVEYOR DRIVE	1.00	1725	3	240	-----	6.3	-----	L56C	P	843656	-----	-----	-----	
1065	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	220	440	3.6	1.8	-----	K56	P	J479260	-----	
1065	SPENCER VACUUM UNIT	1.00	3450	3	208	220	440	3.4	3.2	1.6	56	P	486704	-----	
1065	CONVEYOR DRIVE MOTOR	1.50	1155	3	200	-----	5.8	-----	L56	P	J753217	-----	-----	-----	
1065	FIBER CONV TO INCLNE	1.50	1725	3	220	440	-----	4.4	2.2	-----	204	PA	66158	-----	
1065	METRO PRIMER PRESS	2.00	1725	3	208	-----	6.4	-----	184	620M	-----	N42255	-----	-----	
1065	FIBER CONVEYOR DRIVE	2.00	1730	3	220	-----	8.7	-----	145T	P	None	None	None	None	
1065	HYDRAULIC PUMP MOTOR	7.50	1725	3	230	-----	18.0	-----	213T	744M	-----	N44229	-----	-----	
1068	VACUUM PUMP	25.00	3530	3	208	-----	69.0	-----	284TS	C24B	5504631	-----	-----	-----	
1068	VACUUM PUMP	25.00	3530	3	230	-----	69.0	-----	CE4B	CE	None	None	None	None	
1075	SUMP PUMP MOTOR	.33	1725	1	230	-----	2.2	-----	564	SH	None	None	None	None	
1075	PUMP MOTOR	1.00	1725	3	208	416	-----	2.8	1.4	-----	2010M	-----	69252	-----	
1078	HOT WATER TANK PUMP	2.00	3450	3	200	-----	7.5	-----	56-10	TS	94686	-----	-----	-----	
1095	VACUUM UNIT MOTOR	5.00	3460	3	220	440	-----	13.0	6.5	-----	225	PA	79468	-----	
1102	OVERHEAD HEATER	.33	1140	1	115	230	-----	4.6	2.3	-----	D186	DL	None	None	
1102	#9 MOTOR	.33	1140	1	115	230	-----	4.6	2.3	-----	D186	FL	None	None	
1102	OVERHEAD HEATER	.33	1140	1	115	230	-----	4.2	3.2	-----	D186	FL	None	None	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COS F
1102	OVERHEAD HEATER	.33	1140	1	110	220	---	4.8	2.3	D18B	FL	NONE	---	---
1102	OVERHEAD HEATER	.33	1140	1	110	230	---	4.8	2.3	D18B	FL	NONE	---	---
1102	OVERHEAD HEATER	.33	1140	1	115	---	4.6	3.2	D186	FL	NONE	---	---	
1102	HEATER FAN	.33	1140	3	230	460	---	1.8	.9	56	---	FG88492	---	---
1102	OVERHEAD HEATER	.33	1140	1	110	230	---	4.8	2.3	D18B	FL	NONE	---	---
1102	EXHAUST FAN MOTOR	.33	1725	1	115	---	5.6	---	648	SPS	---	091061	---	---
1102	SAW DRIVE MOTOR	.33	1725	1	115	---	5.2	---	---	---	---	---	---	---
1102	GRINDER	.33	3000	1	115	---	5.2	4.6	---	---	---	76910	---	---
1102	OVERHEAD HEATER	.33	---	1	---	---	4.6	2.3	D186	DL	NONE	---	---	---
1102	OH HEATER FAN #3	.50	1140	1	115	---	7.4	---	C66	---	NONE	---	---	---
1102	TABLE SAW MOTOR	.50	1725	3	208	---	1.9	---	63A	K	75575	---	---	---
1102	GEARHEAD GEARHEAD	.50	1725	3	208	---	3.3	---	K56	---	332593	---	---	---
1102	VARI-DRIVE GEARHEAD	.50	1725	3	208	---	4.0	---	L56C	P	87270	---	---	---
1102	GEARHEAD	.50	1725	3	208	---	3.3	---	K56	---	87268	---	---	---
1102	HEATER BLOWER MOTOR	.50	1740	3	220	440	---	2.0	1.0	163	---	67800	---	---
1102	POWER VISE	.50	14000	1	115	---	8.0	---	56	---	29	---	---	---
1102	SPARE DRILL PRESS	.75	1725	3	208	---	3.4	---	---	00596	---	---	---	---
1102	CONDENSATE PUMP	.75	1735	3	220	440	---	2.4	1.2	A66	---	69272	---	---
1102	REDATOR CIRCULAT PUMP	1.00	1735	3	200	---	4.3	---	143T	OE4B	L910767	---	---	---
1102	CIRCULATING PUMP	1.00	1740	3	200	---	4.5	---	143T	---	L660041	---	---	---
1102	VENT FAN	1.00	1740	1	115	230	---	14.4	7.2	E182	---	91325	---	---
1102	CIRCULATING PUMP	1.00	1740	3	200	---	4.5	---	143T	---	L660042	---	---	---
1102	SPARE MOTOR	1.50	1160	3	220	440	---	5.7	2.9	182T	GE4B	NONE	---	---
1102	VENTILATOR MOTOR	1.50	3600	3	208	440	---	5.3	2.5	182T	RS	NONE	---	---
1102	EXHAUST FAN MOTOR	3.00	1730	3	230	460	---	8.7	4.4	182T	---	89808	---	---
1102	BLOWER AIR CONDITION	3.00	---	3	208	440	---	9.0	4.5	213	---	NONE	---	---
1102	AIR COMPRESSOR MOTOR	5.00	1725	3	200	---	16.6	---	184T	A	---	90936	---	---
1102	VACUUM MOTOR	5.00	3460	3	208	---	13.9	---	184T	CE4B	NONE	---	---	---
1102	VACUUM UNIT MOTOR	5.00	3460	3	208	---	13.9	---	184T	---	90935	---	---	---
1102	PORTABLE VACUUM	5.00	3460	3	208	---	13.9	---	225	JES	45627	---	---	---
1102	VACUUM UNIT MOTOR	5.00	3475	3	220	440	---	13.0	6.5	---	---	NONE	---	---
1102	HEATER FAN	15.00	1500	1	115	---	2.0	---	---	---	---	---	---	---
1102	BATTERY CHARGER	---	---	1	115	---	16.0	---	---	---	78547	---	---	---
1102	SPARE KETTLE MOTOR	15.00	1750	3	208	220	440	4.2	2.0	254T	CE4B	J507571	---	---
1102	REDWATER PUMP MOTOR	20.00	1765	3	230	460	---	48.8	24.4	256TPH	LUNRR	R207081	---	---
1102	REDWATER PUMP MOTOR	20.00	1765	3	230	460	---	48.8	24.4	256TPH	LUNRR	R206437	---	---
1102	REDWATER PIT PUMP	20.00	1765	3	230	460	---	48.8	24.4	256TPH	LUNRR	R207081	---	---
1102	REDWATER PIT PUMP	20.00	1765	3	230	460	---	48.8	24.4	256TPH	LUNRR	R207081	---	---
1105	OIL PUMP MOTOR	.50	1725	3	208	220	440	1.9	1.8	D56	PF	NONE	---	---
1105	FUEL OIL PUMP MOTOR	.50	1725	3	208	220	440	1.8	---	D56	PF	NONE	---	---
1105	FUEL OIL PUMP #1	.75	1735	3	208	220	440	2.8	2.7	F56	PF	NONE	---	---
1105	FUEL OIL PUMP #2	.75	1725	3	208	220	440	2.8	2.7	F56	PF	NONE	---	---
1105	MAKEUP WTR TRANSFER	2.00	3460	3	200	---	6.9	---	R145T	C0G4B	NONE	---	---	---
1105	MAKEUP WTR TRANSFER	2.00	3460	3	200	---	6.9	---	---	---	---	---	---	---
1105	COMPRESSOR MOTOR AIR	5.00	1725	3	200	---	16.6	---	184T	A	08511	---	---	---
1105	STACK BLOWER FAN #3	5.00	1735	3	208	---	14.6	---	254	K	05072	---	---	---
1105	STACK FAN #1	5.00	1735	3	208	---	14.6	---	254	OS	02263	---	---	---
1105	STACK FAN MOTOR #2	5.00	1750	3	208	---	14.4	---	254	OS	02263	---	---	---
1105	BOILER FEED PUMP #2	7.50	1745	3	200	400	---	23.4	11.7	213T	---	---	---	---
1105	PUMP MOTOR	7.50	1745	3	200	400	---	23.4	11.7	213T	---	---	---	---
1105	BURNER MOTOR	7.50	1800	3	200	---	22.4	---	AFO-1200	COSO	---	---	---	---
1105	BURNER MOTOR	7.50	1800	3	200	---	22.4	---	AFO-1200	COSO	---	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1105	BURNER MOTOR	7.50	1800	3	200	22.4	AFO-1200	COSO	NONE					
1105	BURNER AIR & STACK 2	10.00	3465	3	200	27.5	215TD	TFS-BZD	NONE					
1105	BURNER AIR & STACK 1	10.00	3465	3	200	27.5	215TD	TFS-BZD	NONE					
1105	BOILER WATER FEED #1	15.00	3515	3	200	42.7	254T	-----	NONE					
1105	BOILER WATER FEED #3	15.00	3515	3	200	42.7	254T	-----	NONE					
1105	BOILER WATER FEED #2	15.00	3515	3	200	42.7	254T	-----	NONE					
1108	WATER EVAPORT COOLING	.75	1725	3	230	460	2.6	1.3	56-5	TS	NONE			
1108	WATER PUMP DRIVE	.75	1735	3	230	460	3.6	1.8	143T	TDR-BE	NONE			
1108	AIR COMPRESSOR DRIVE	125.0	1730	3	400	141.	405T	R	NONE					
1109	CONDENSER FAN MOTOR	.33	825	1	440	1.3	-----	-----	-----	-----	-----	07462		
1109	CONDENSER FAN MOTOR	.33	825	1	440	1.3	-----	-----	-----	-----	-----	07462		
1109	HEATER FAN	.33	1140	3	230	460	1.8	.9	56	-----	-----	-----	-----	
1109	HOOD EXHAUST FAN	.33	1725	1	115	-----	4.7	-----	ZD56	FH	NONE			
1109	COMPRESSOR (1)	.33	-----	1	440	1.3	-----	-----	-----	-----	-----	07462		
1109	OVERHEAD HEATER	.50	1140	1	115	230	9.4	4.7	7457	RA	6746219			
1109	DRIVE MOTOR	.50	1725	3	208	4.0	-----	-----	L56C	P	NONE			
1109	BELT DRIVE MOTOR	.50	1725	3	208	3.2	-----	-----	K56	P	87994			
1109	DRIVE MOTOR	.50	1725	3	208	3.2	-----	-----	K56	P	NONE			
1109	BELT DRIVE MOTOR	.50	1725	3	208	3.3	-----	-----	-----	P	87271			
1109	CONVEYOR MOTOR	.75	1725	3	208	5.3	-----	-----	L56C	P	88000			
1109	GEARHEAD CONVEYOR	.75	1725	3	208	5.3	-----	-----	L56C	P	NONE			
1109	DRIVE MOTOR	.75	1725	3	208	5.3	-----	-----	L56G	P	87313			
1109	CIRCULATING PUMP	.75	1750	3	208	2.4	-----	-----	182CZ	P	90701			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93440			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93440			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93440			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93440			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93442			
1109	AIR CONDITIONER FAN	1.00	1140	3	460	2.7	-----	-----	5635M	-----	93443			
1109	HEAT TUNNEL DRIVE	1.00	1725	3	208	4.0	-----	-----	5635M	-----	93551			
1109	HEAT TUNNEL DRIVE	1.00	1725	3	208	4.0	-----	-----	182	AEIX	NONE			
1109	#3 POUR CONV DRIVE	1.00	1725	3	208	6.0	-----	-----	5635M	-----	93551			
1109	CIRCULATING PUMP	1.00	1730	3	208	440	3.2	1.6	182	P	87278			
1109	CIRCULATING PUMP	1.00	1730	3	208	220	440	3.2	1.6	182	K	88599		
1109	CIRCULATING PUMP	1.00	1730	3	208	220	440	3.2	1.6	182	K	88598		
1109	WATER PUMP MOTOR	1.00	1730	3	208	440	3.6	1.8	182CZ	-----	88597			
1109	CIRCULATING PUMP	1.00	1730	3	208	440	3.2	1.6	182	J	8813			
1109	PRE-HEAT BLOWER	1.00	1745	3	208	440	6.7	3.2	184	CE4B	NONE			
1109	PUMP MOTOR	2.00	1730	3	208	440	6.6	3.2	184	SC	NONE			
1109	PUMP MOTOR	2.00	1730	3	208	220	440	6.7	6.3	143T	CE4B	NONE		
1109	EXHAUST BLOWER	1.50	1750	3	208	220	440	4.3	-----	143T	CE4B	NONE		
1109	PUMP MOTOR	2.00	1730	3	208	440	6.7	3.2	184	E	88406			
1109	PUMP MOTOR	2.00	1730	3	208	440	6.6	3.2	184	E	88407			
1109	PUMP MOTOR	2.00	1730	3	208	220	440	6.7	6.3	143T	SC	88405		
1109	VACUUM PUMP MOTOR	2.00	1740	3	208	220	440	6.7	6.3	184	E	88404		
1109	VACUUM PUMP MOTOR	2.00	1740	3	208	220	440	14.6	-----	184T	GE48	89815		

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST
1109	VACUUM PUMP MOTOR	2.00	1740	3	220	---	14.6	---	89816	---	---	---	---	---
1109	COOLING BLOWER DRIVE	3.00	1725	3	208	440	9.0	4.5	K	89864	---	---	---	---
1109	ROTO CONE MOTOR	3.00	1740	3	220	440	8.4	4.2	EX	69186	---	---	---	---
1109	BLOWER EXHAUST MOTOR	3.00	1740	3	220	440	8.4	4.2	EX	69187	---	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	440	7.6	3.5	225	K	78809	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	440	9.0	4.5	225	K	89863	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	220	440	7.6	3.5	225	K	89862	---	---	---
1109	AIR COOLING BLOWER	3.00	1750	3	208	---	18.0	---	225	K	79192	---	---	---
1109	ELEVATOR DRIVE MOTOR	5.00	1000	3	208	---	18.0	---	284	---	79188	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	460	13.0	6.5	184T	RGZ2	NONE	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	460	13.0	6.5	184T	RGZ2	NONE	---	---	---
1109	EXHAUST DRIVE MOTOR	5.00	1740	3	230	460	13.0	6.5	184T	RGZ2	NONE	---	---	---
1109	CONVEYOR MOTOR	---	---	---	220	440	7.6	3.8	225	---	78807	---	---	---
1109	COMPRESSOR	---	---	---	1800	3	460	---	76.0	---	---	---	---	9344.2
1109	COMPRESSOR	---	---	---	1800	3	460	76.0	284	---	---	---	---	9344.2
1109	COMPRESSOR (2)	---	---	---	1800	3	460	76.0	254T	JEX	---	---	---	9344.2
1109	MIXER MOTOR	---	---	---	---	3	440	12.2	254T	---	---	---	07462	---
1109	CONDENSATE PUMP	---	---	---	---	3	440	---	254T	---	---	---	92998	---
1109	REFRIG COMPRESSOR	---	---	---	460	---	76.0	---	254T	---	---	---	75527	---
1109	VACUUM UNIT MOTOR	10.00	3500	3	220	440	25.0	12.5	284	---	---	---	9344.0	---
1109	COOL TUNNEL EXHST #4	15.00	1750	3	230	460	39.0	19.5	254T	---	NONE	---	76353	---
1109	COOL TUNNEL EXHST #3	15.00	1750	3	230	460	39.0	19.5	254T	---	NONE	---	---	---
1109	COOL TUNNEL EXHST #1	15.00	1750	3	230	460	39.0	19.5	254T	---	NONE	---	---	---
1109	COOL TUNNEL EXHST #2	15.00	1750	3	230	460	39.0	19.5	254T	---	NONE	---	---	---
1109	KETTLE DRIVE MOTOR	15.00	1760	3	220	440	38.0	19.0	326	EX	75970	---	---	---
1109	MOTOR	15.00	1760	3	220	440	38.0	19.0	326	EX	75971	---	---	---
1109	BLOWER	40.00	1770	3	230	460	103.5	51.5	324T	---	NONE	---	---	---
1111	CONDENSATE MOTOR	.33	1140	3	208	---	3.2	---	225	---	64017	---	---	---
1111	MOTOR	3.00	1725	3	208	---	8.4	---	225	PB	77214	---	---	---
1111	ELEVATOR MOTOR	5.00	1000	3	208	---	8.4	---	284	---	79190	---	---	---
1113	VARI DRIVE MOTOR	.50	1725	3	208	---	1.5	---	56C	P	87314	---	---	---
1113	VARI DRIVE MOTOR	.50	1725	3	208	---	1.5	---	56C	P	88002	---	---	85832
1113	CHAIN CONVEYOR	2.00	1730	3	208	220	440	6.2	5.8	184	K	89823	---	---
1113	OH CHAIN CONVEYOR	2.00	1730	3	208	220	440	6.0	3.0	324	E	89832	---	---
1113	VACUUM MOTOR	25.00	3540	3	220	440	63.0	31.5	3240	E	89830	---	---	---
1113	VACUUM MOTOR	25.00	3540	3	220	440	63.0	31.5	324U	E	89824	---	---	---
1113	VACUUM MOTOR	25.00	3540	3	208	---	63.0	31.5	286TS	CE4R	88589	---	---	---
1113	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	225	---	87315	---	---	---
1114	DRIVE MOTOR	.50	1725	3	208	---	4.0	---	L56C	P	88005	---	---	---
1114	VARI DRIVE MOTOR	.50	1725	3	208	---	4.0	---	L56C	P	---	NONE	---	---
1114	EXHAUST FAN MOTOR	.50	1725	1	115	---	1.8	---	48	---	78677	---	---	---
1114	OH CONVEYOR DRIVE	2.00	1140	3	220	440	6.4	3.2	225	---	SC	85831	---	---
1114	CHAIN CONVEYOR DRIVE	2.00	1730	3	208	220	440	6.0	3.0	184	K	89822	---	---
1114	VACUUM MOTOR	25.00	3540	3	220	440	63.0	31.5	324U	E	89829	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	286TS	CE4B	88371	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	236TS	CE4B	88372	---	---	---
1114	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	286TS	CE4B	88374	---	---	---
1122	FAN MOTOR	.50	1730	3	208	---	4.7	---	224	K	74298	---	---	---
1122	CONDENSATE PUMP	1.00	1730	3	220	440	3.1	1.6	203	0.6X	69275	---	---	---
1124	COOLING TOWER MOTOR	1.00	1730	3	230	460	3.8	1.9	143T	---	NONE	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1124	CIRCULATING PUMP	1.00	1735	3	230	460	3.6	1.8	-----	143T	-----	-----	-----	-----
1124	COMPRESSOR MOTOR	125.0	1780	3	460	-----	141.	-----	405T	R	-----	-----	-----	-----
1124	COMPRESSOR	125.0	1780	3	460	-----	141.	-----	405T	R	-----	-----	-----	-----
1127	CONT. FEED PUMP	.50	1725	1	115	230	7.8	3.9	56	-----	-----	-----	-----	-----
1127	AIR COMPRESSOR DRIVE	1.00	1725	1	115	230	13.2	6.6	56	-----	-----	-----	-----	-----
1127	OVERHEAD HOIST MOTOR	1.50	1760	3	208	-----	14.9	6.6	182TDZ	K	-----	-----	-----	-----
1127	PRE-COAT FUMP MOTOR	3.00	3505	3	208	-----	10.1	-----	1822	P	-----	-----	-----	-----
1127	VERTICAL MOTOR #2	7.50	3450	3	208	-----	23.0	-----	213TP	LU	-----	-----	-----	-----
1136	CLOUDING TOWER MOTOR	.33	1725	1	115	230	6.4	3.2	56	-----	-----	-----	-----	-----
1136	CIRCULATING WATER	.50	1725	3	115	208	230	6.8	3.4	6	-----	-----	-----	-----
1136	OVERHEAD DOOR #1	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #2	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #3	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #2	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #1	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	EXHAUST FAN	.50	1725	3	240	460	3.0	1.5	556	P	89384	-----	-----	-----
1136	OVERHEAD DOOR #4	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #6	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	OVERHEAD DOOR #5	.50	1725	1	115	-----	7.8	-----	56C	-----	-----	-----	-----	-----
1136	BANDING CUTTER DRIVE	.50	1725	1	115	-----	10.0	-----	MM14.3TC	-----	-----	-----	-----	-----
1136	OH HEATER FAN #3	1.00	855	3	220	440	4.1	2.1	213	E	-----	-----	-----	-----
1136	OH HEATER FAN #4	1.00	900	3	208	220	440	4.4	2.1	213	E	-----	-----	-----
1136	HEATER	1.00	900	3	208	440	4.3	2.1	213	E	-----	-----	-----	-----
1136	OH HEATER FAN #2	1.00	900	3	208	220	440	4.4	2.1	213	E	-----	-----	-----
1136	DRY ICE CRUSHER	1.50	1740	3	208	440	4.5	2.1	WCP1B4	88441	-----	-----	-----	-----
1136	AIR HANDLER DRIVE	2.00	1735	3	208	-----	6.2	-----	224	K	-----	-----	-----	-----
1136	AIR HANDLER DRIVE	2.00	1735	3	208	-----	6.2	-----	224	K	41296	-----	-----	-----
1136	FLOOR CONV DRIVE	2.00	1800	3	208	220	440	7.6	3.8	14-184-41	VEVEFFGM	87383	-----	-----
1136	FAN MOTOR EXHAUSTER	3.00	1160	3	220	440	9.6	4.8	254	HP1	74812	-----	-----	-----
1136	COMPRESSOR DRIVE	3.00	1740	3	230	460	9.2	4.6	182T	CE4B	88358	-----	-----	-----
1136	COMPRESSOR DRIVE	3.00	1740	3	230	460	9.2	4.6	182T	CE4B	67999	-----	-----	-----
1136	EXHAUST FAN DRIVE	7.50	1760	3	208	220	440	21.2	10.6	254U	K	87046	-----	-----
1136	CIRCULATING PUMP	7.50	1760	3	208	220	440	21.2	10.6	254U	K	89045	-----	-----
1139	AIR COND CONDENSER	.33	825	1	440	-----	1.3	-----	-----	-----	-----	-----	-----	-----
1139	CONDENSER FAN MOTOR	.33	825	1	230	-----	2.3	-----	562	-----	-----	-----	-----	-----
1139	AIR COND CONDENSER	.33	825	1	440	-----	1.3	-----	-----	-----	-----	-----	-----	-----
1139	CONDENSER FAN MOTOR	.33	825	1	230	-----	2.3	-----	562	-----	-----	-----	-----	-----
1139	CLOUDING TOWER MOTOR	.33	1725	1	115	230	5.4	2.7	E56	RK	-----	-----	-----	-----
1139	EXHAUST BLOWER DRIVE	.33	1725	3	230	460	1.5	.8	562	-----	-----	-----	-----	-----
1139	EXHAUST FAN MOTOR	.33	1725	1	115	230	5.6	2.8	562	-----	88485	115	5.6	8.6*
1139	CLOUDING TOWER MOTOR	.33	1725	3	208	-----	3.2	-----	562	-----	-----	-----	-----	-----
1139	HEATER FAN MOTOR	.33	1725	1	115	-----	3.4	-----	56-5	SSE	-----	-----	-----	-----
1139	CROSS CONVEYOR MOTOR	.50	1725	3	208	-----	3.2	-----	560	P	87264	-----	-----	-----
1139	OH HEATER FAN MOTOR	.50	1725	1	115	-----	7.6	-----	2356	FH	-----	-----	-----	-----
1139	CROSS CONVEYOR	.50	1725	3	208	-----	3.2	-----	560	P	87266	-----	-----	-----
1139	COOL TWR CIRCUL PUMP	.75	1725	1	115	230	9.2	4.6	H56C	HK	-----	-----	-----	-----
1139	CIRCULATING PUMP	.75	1750	3	208	-----	2.4	-----	18207	P	90700	-----	-----	-----
1139	BLOWER MOTOR	1.00	1725	1	115	230	-----	-----	56	-----	-----	-----	-----	-----
1139	DRIVE MOTOR	1.50	1730	3	208	-----	7.6	-----	45TC	P	87277	-----	-----	-----
1139	BLOWER	1.50	1750	3	208	440	4.0	2.0	PM184	-----	-----	-----	-----	-----
1139	AIR COND COMPRESSOR	25.00	1175	3	208	220	64.0	32.0	364U	K	87137	-----	-----	-----

* Active motor but annual hours of operation not known.

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
1139	CRIMPING MACHINE	25.00	1175	3	208 220	440 64.0	32.0	---	364U	K	85927	---	---	---
1139	CRIMPING MACHINE	25.00	1175	3	208 220	440 64.0	32.0	---	364U	K	87000	---	---	---
1139	CRIMPER MOTOR #2A	25.00	1175	3	208 440	---	64.0	32.0	364U	K	86894	---	---	---
1139	CRIMPER MOTOR #3A	25.00	1175	3	208 440	---	64.0	32.0	364U	K	87007	---	---	---
1139	CRIMPING MACHINE	25.00	1175	3	208 220	440 64.0	32.0	---	364U	K	86893	---	---	---
1139	CRIMPER MOTOR #4A	25.00	1175	3	208 220	440 64.0	32.0	---	364U	K	87136	---	---	---
1139	CRIMPER MOTOR #5A	25.00	1180	3	208 440	---	66.0	31.0	364U	---	---	---	---	---
1139	CRIMPING MACHINE	25.00	1180	3	208 220	440 64.0	32.0	---	364U	K	86893	---	---	---
1140	OH HEATER #4	.33	1725	1	115	230	---	4.8	2.4	---	556	---	---	---
1140	OH HEATER #1	.33	1725	1	115	230	---	4.8	2.4	---	556	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	230	---	5.6	2.4	---	556	---	---	---
1140	OH HEATER #2	.33	1725	1	115	230	---	4.8	2.4	---	556	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	230	---	5.6	2.4	---	556	---	---	---
1140	OH DOOR MOTOR	.33	1725	1	115	230	---	5.6	2.4	---	556	---	---	---
1140	OH HEATER #3	.33	1725	1	115	230	---	4.8	2.4	---	556	---	---	---
1140	DEHUMIDIFIER REACTI	.33	3545	3	208 220	440 1.5	.8	---	56	---	---	---	---	---
1140	PACE DOWNLOADER ABSORP	.50	3515	3	208 220	440 1.5	.8	---	56	---	---	---	---	---
1140	PACE DOWNLOADER	.75	1720	3	230 460	---	3.6	1.8	---	6-143-5	---	---	---	---
1140	PACE DOWNLOADER	.75	1720	3	230 460	---	3.6	1.8	---	6-143-5	---	---	---	---
1140	PACE DOWNLOADER	.75	1750	3	230 460	---	3.1	1.6	---	143T	AE 4 B	---	---	---
1140	PACE DOWNLOADER BELT	.75	1750	3	230 460	---	3.1	1.6	---	143T	AE 4 S	---	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	86719	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	8670B	---	---
1140	DOWNLOADER CONVEYOR	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	86716	---	---
1140	DOWNLOADER UP CONVEY	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	80717	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	8771B	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	90514	---	---
1140	VARI DRIVE UNIT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	86709	---	---
1140	DOWNLOADER BELT	.75	1800	3	220 440	---	3.5	1.8	---	6-56-21	VALEVFD	86710	---	---
1140	VARI DRIVE MOTOR	.50	1750	3	208 220	440 16.3	15.4	7.7	215	AX	86769	---	---	---
1140	VARI UNIT CONV #3	5.00	1750	3	208 440	---	16.3	15.4	7.7	215	AX	86770	---	---
1140	VARI UNIT CONV #4	5.00	1750	3	208 440	---	16.3	15.4	7.7	215	AX	89811	---	---
1140	VARI UNIT CONV #1	5.00	1750	3	208 220	440 16.3	15.4	7.7	215	AX	86772	---	---	---
1140	VARI DRIVE MOTOR	5.00	1750	3	208 220	440 16.3	15.4	7.7	215	AX	86771	---	---	---
1145	VACUUM MOTOR	25.00	3540	3	220 440	---	63.0	31.5	324U	E	89825	---	---	---
1145	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	286TS	CE4B	88587	---	---	---
1145	VACUUM MOTOR	30.00	3540	3	208	---	83.0	---	286TS	CE4B	88588	---	---	---
1147	CONDENSATE MOTOR	1.00	1730	3	208 220	440 4.3	2.2	---	143T	P	---	---	---	---
1147	CONVEYOR DRIVE MOTOR	.75	1725	3	208	---	2.4	---	---	K	67851	---	---	---
1147	CONVEYOR DRIVE MOTOR	.75	1725	3	208	---	2.4	1.2	7420W	PA	77211	---	---	---
1147	CONVEYOR DRIVE MOTOR	5.00	1725	3	208	---	13.7	---	254	PB	77213	---	---	---
1147	CONVEYOR DRIVE MOTOR	5.00	1725	3	208	---	13.7	---	254	PB	77212	---	---	---
1205	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	---	---	---	---
1205	MOTOR	.75	1725	3	208	---	2.4	---	---	---	---	---	---	---
1205	CENTER SHAKER MOTOR	1.00	1130	3	208	---	3.6	---	204	K	84956	---	---	---
1205	NORTH SHAKER MOTOR	1.00	1130	3	208	440	3.4	1.7	204	K	75273	---	---	---
1205	SOUTH STOKER MOTOR	1.00	1140	3	208	440	3.4	1.7	204	PG	75272	---	---	---
1205	LIME FEED MOTOR	1.00	1140	3	208	---	4.0	---	246	PG	68944	---	---	---
1205	LIME MIX MOTOR	1.00	1145	3	208	---	4.0	---	224	PG	75270	---	---	---
1205	PUMP MOTOR	1.50	2935	3	220	440	12.8	5.6	203Y	---	72834	---	---	---
1205	SUMP PIT SHAKER	2.00	---	---	---	---	254	---	36054	---	64100	---	---	---
1205	AIR COMPRESSOR MOTOR	3.00	1740	3	220	440	8.8	4.4	225	---	08309	---	---	---
1205	COAL ELEVATOR MOTOR	5.00	1730	3	208	---	14.7	---	254	---	---	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
1205	SPARE MOTOR	5.00	1750	3	208	---	14.0	RP	14208	---	---	---	---	---	
1205	BACKWASH PUMP MOTOR	5.00	3450	3	208	---	18.0	K	75284	---	---	---	---	---	
1205	CONVEYOR MOTOR	7.50	1735	3	220	440	2.0	K	67400	---	---	---	---	---	
1205	STEAM VALVE MOTOR	---	1725	1	115	---	3.3	K	75235	---	---	---	---	---	
1205	STACK FAN MOTOR	15.00	1175	3	220	440	3.6	K	75232	---	---	---	---	---	
1205	STACK FAN MOTOR	15.00	1175	3	220	440	3.6	K	75233	---	---	---	---	---	
1205	STACK FAN MOTOR	15.00	1175	3	220	440	3.6	K	75234	---	---	---	---	---	
1205	FEED PUMP MOTOR	30.00	3535	3	208	426	74.0	CS	19451	---	---	---	---	---	
1413	CONDENSATE MOTOR	.50	1735	3	220	440	1.6	K	41180	---	---	---	---	---	
1414	CONDENSER FAN MOTOR	.33	825	1	208	240	2.2	SC	---	---	---	---	---	---	
1414	CONDENSER FAN MOTOR	.33	825	1	208	240	2.1	SC	---	---	---	---	---	---	
1414	AIR HANDLER MOTOR	1.00	3450	1	115	208	230	11.4	K	---	---	---	---	---	
2106	CONDENSATE PUMP	.75	1550	3	208	220	440	2.5	K	---	---	---	---	---	
2106	PUMP MOTOR	2.00	1100	3	220	440	8.9	K	PFU3	---	---	---	---	---	
2203	PUMP DRIVE MOTOR	.50	3450	1	115	230	7.4	K	41057	---	---	---	---	---	
2203	EXHAUST FAN MOTOR	.33	1725	1	115	230	7.4	K	41057	---	---	---	---	---	
3002	AIR HANDLER FAN	5.00	1735	3	230	460	13.2	K	41057	---	---	---	---	---	
3004	EXHAUST FAN	.33	1725	1	115	---	5.4	K	41057	---	---	---	---	---	
3004	SUB SUMP PUMP	.33	1725	1	120	---	5.4	K	41057	---	---	---	---	---	
3004	WATER SEAL PUMP	.50	1725	3	208	440	2.0	K	41057	---	---	---	---	---	
3004	#1 PUMP	7.50	1745	3	230	460	20.0	K	41057	---	---	---	---	---	
3004	#2 PUMP	7.50	1745	3	230	460	20.0	K	41057	---	---	---	---	---	
3005	CAUSTIC MIX FR MOTOR	.33	1725	1	115	230	---	K	41057	---	---	---	---	---	
3005	PUMP MOTOR	.33	1725	1	115	230	5.2	K	41057	---	---	---	---	---	
3005	HEATER FAN - N. WEST	.50	1140	3	230	460	2.1	K	41057	---	---	---	---	---	
3005	OVERHEAD HEATER FAN	.50	1140	3	230	460	2.1	K	41057	---	---	---	---	---	
3005	AIR HANDLER	1.00	1735	3	230	460	3.6	K	41057	---	---	---	---	---	
3005	BRINE TANK PUMP	1.00	3510	3	230	460	2.7	K	41057	---	---	---	---	---	
3005	AIR COMPRESSOR MOTOR	5.00	860	3	230	460	18.0	K	41057	---	---	---	---	---	
3005	AIR COMPRESSOR MOTOR	5.00	860	3	230	460	2.1	K	41057	---	---	---	---	---	
3005	CIRCULATING FAN	5.00	1735	3	230	460	13.6	K	41057	---	---	---	---	---	
3005	FUEL OIL PUMP #2	5.00	1745	3	230	460	14.2	K	41057	---	---	---	---	---	
3005	FUEL OIL PUMP #1	5.00	1745	3	230	460	14.2	K	41057	---	---	---	---	---	
3005	#1 BOILER BLOWER	10.00	1725	3	208	220	440	27.5	K	41057	---	---	---	---	---
3005	BOILER BLOWER	10.00	1725	3	208	220	440	27.5	K	41057	---	---	---	---	---
3005	FIRE PROTECTION PUMP	100.0	1780	3	230	460	240.0	K	40475	---	---	---	---	---	
3005	AIR COMPRESSOR #2	125.0	585	3	220	440	340.0	K	6334Y	---	---	---	---	---	
3005	AIR COMPRESSOR #1	125.0	585	3	220	440	340.0	K	6334Y	---	---	---	---	---	
3005	SOFT WATER PUMP #2	15.00	3505	3	460	---	17.5	K	6334Y	---	---	---	---	---	
3005	SOFT WATER PUMP #1	15.00	3505	3	460	---	17.5	K	6334Y	---	---	---	---	---	
3005	SOFT WATER SUPPLY	20.00	3515	3	460	---	25.0	K	254T	---	---	---	---	---	
3005	SOFT WATER SUPPLY #1	20.00	3515	3	460	---	25.0	K	254T	---	---	---	---	---	
3005	DEMINERALIZED #2	30.00	3530	3	460	---	36.0	K	284TS	---	---	---	---	---	
3005	DEMINERALIZED #1	30.00	3530	3	460	---	36.0	K	284TS	---	---	---	---	---	
3005	BOILER FEED PUMP	50.00	3545	3	230	460	121.5	K	215T	---	---	---	---	---	
3006	DOALL SAW OIL PUMP	.33	3450	3	220	440	1.4	K	254T	---	---	---	---	---	
3006	OVERHEAD DOOR DRIVE	.50	1725	1	115	---	8.8	K	563	---	---	---	---	---	
3006	PIPE THREADER MOTOR	.50	14000	1	115	---	8.0	K	LO	---	---	---	---	---	
3006	PIPE MACHINE DRIVE	.50	14000	1	115	---	8.0	K	LO	---	---	---	---	---	
3006	LATHE	.75	1725	3	208	440	2.8	K	1216B	36	---	---	---	---	
3006	BENCH GRINDER	.75	3450	1	115	230	14.1	K	0564	---	---	---	---	---	
3006	DRILL PRESS MOTOR	1.00	1720	3	220	440	3.2	K	203	203	---	---	---	---	

* Active motor but annual hours of operation not known.

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
3006	DOALL SAW MOTOR	1.00	1725	1	115	208	230	13.0	6.5	156	KF03	L574447	---	---
3006	FAN FOR PAINT BOOTH	1.00	1730	3	208	440	---	3.2	1.6	182	K	0001122	---	---
3006	GRINDER MOTOR	1.00	1750	3	460	---	2.0	---	---	3U	000105	---	---	---
3006	GRINDER MOTOR	1.00	1750	3	460	---	2.0	---	---	3U	000104	---	---	---
3006	#3 EXHAUSTION FAN	1.50	1725	3	220	440	---	6.2	3.1	56	---	---	---	---
3006	#1 EXHAUSTION FAN	1.50	1725	3	220	440	---	6.2	3.1	56	---	---	---	---
3006	#2 EXHAUSTION FAN	1.50	1725	3	220	440	---	6.2	3.1	56	---	---	---	---
3006	DOALL SAW DRIVE	1.50	---	3	208	220	440	5.8	4.6	184	---	---	---	---
3006	COIL COOLING FAN	2.00	1735	3	---	---	6.0	3.0	145T	TDR-BE	---	---	---	---
3006	GRINDER MOTOR	2.00	1750	3	230	460	---	3.4	---	411	000103	---	---	---
3006	SHAFT DRIVE MOTOR	3.00	1725	3	220	440	---	12.0	11.4	6.0	---	N204X	---	---
3006	DRIVE MOTOR	3.00	1750	3	220	440	---	26.0	25.0	13.5	---	N324	---	---
3006	LATHE - 16"	5.00	1460	3	220	440	---	15.6	7.8	254	CSP	093029	---	---
3006	AIR HANDLER MOTOR	5.00	1745	3	230	460	---	14.6	7.3	184T	SC	---	---	---
3006	COIL COOL FAN CONDEN	7.50	1730	3	230	460	---	20.0	10.0	213T	TDR-BE	---	---	---
3006	AIR HANDLER MOTOR	7.50	1750	3	115	230	440	21.0	10.5	---	---	---	---	---
3007	GAS PUMP MOTOR	.50	1720	3	208	220	440	7.2	3.6	---	---	000478	---	---
3007	STORES	---	---	3	230	460	---	2.8	2.6	1.3	---	95343	---	---
3007	DECARBON PUMP MOTOR	.50	1725	3	230	460	---	2.2	1.1	56	P	000408	---	---
3007	PUMP MOTOR	.50	1790	3	460	---	1.9	---	---	182TY	P	94965	---	---
3007	AUTO CLAVE PUMP MTR	.50	1790	3	---	---	1.9	---	---	182TY	P	94967	---	---
3007	PUMP MOTOR	.50	1790	3	460	---	1.9	---	---	182TY	P	94966	---	---
3007	PUMP MOTOR	.50	1790	3	460	---	1.9	---	---	182TY	P	94964	---	---
3007	HOT WATER HEATER MTR	.50	3450	3	230	460	---	2.0	1.0	56	P	00016	---	---
3007	CENTRIFUGAL PUMP MTR	.50	3450	3	230	460	---	1.9	1.0	56	P	000071	---	---
3007	HOT WATER HEATER MTR	.50	3450	3	230	460	---	2.0	1.0	56	P	000165	---	---
3007	MIXER GEAR HEAT MTR	.75	1785	3	460	---	2.1	---	---	182T	P	001512	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230	460	---	4.3	2.2	56H	ES	---	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230	460	---	4.3	2.2	56H	ES	---	---	---
3007	VENT FAN MOTOR	1.50	1725	3	230	460	---	4.3	2.2	56H	ES	---	---	---
3007	STORE	1.50	1755	3	460	---	2.5	---	---	182T	P	000930	---	---
3007	PUMP MOTOR	1.50	1755	3	460	---	2.5	---	---	182T	P	000935	---	---
3007	PUMP MOTOR	1.50	1755	3	460	---	2.5	---	---	182T	P	000943	---	---
3007	MOTOR	3.00	1745	3	460	---	4.6	---	---	182T	P	94975	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	---	4.3	---	---	182T	P	000917	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	---	4.6	---	---	182T	P	000927	---	---
3007	MOTOR	3.00	1745	3	460	---	4.6	---	---	182T	P	94978	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	---	4.3	---	---	182T	P	000912	---	---
3007	GEAR REDUCTION MOTOR	3.00	1745	3	460	---	4.6	---	---	182T	P	000921	---	---
3007	HYDRAULIC PUMP MOTOR	5.00	1200	3	220	440	---	15.3	7.9	AVE254U	D000-39	95008	---	---
3007	PUMP MOTOR	5.00	1200	3	220	440	---	15.8	7.9	AUE-254U	---	95010	---	---
3007	PUMP MOTOR	5.00	1200	3	220	440	---	15.8	7.9	AUE-254U	---	95009	---	---
3007	BLOWER MOTOR	5.00	1730	3	230	460	---	13.6	6.8	1BT	T	000375	---	---
3007	MOTOR	5.00	1740	3	440	---	7.0	---	---	215	PM	94971	---	---
3007	MOTOR-CONVEYOR DRIVE	5.00	1790	3	230	460	---	5.8	2.9	---	P	NONE	---	---
3007	MOTOR	5.00	3485	3	460	---	7.0	---	---	184T	P	94973	---	---
3007	MOTOR	5.00	3485	3	230	460	---	14.0	7.0	184T	P	94982	---	---
3007	PUMP MOTOR	5.00	3485	3	230	460	---	14.0	7.0	184T	P	00099	---	---
3007	MOTOR	7.50	1760	3	460	---	10.5	---	---	213T	P	94983	---	---
3007	MOTOR	7.50	1760	3	460	---	10.5	---	---	213T	P	94985	---	---
3007	PUMP MOTOR	10.00	3510	3	460	---	12.0	---	---	215T	P	94980	---	---

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3007	PUMP MOTOR	10.00	3550	3	460	---	12.0	---	215T	P	000168	---	---	---
3007	PUMP MOTOR	50.00	1800	3	460	---	59.3	---	365UP	JU	29151	---	---	---
3008	TRANSFER FAN	.50	1725	3	230	460	2.8	1.4	B56	P	NONE	---	---	---
3008	EXHAUST FAN #2	3.00	1745	3	460	---	4.6	---	182T	P	000443	---	---	---
3008	EXHAUST FAN	5.00	1740	3	230	460	6.8	---	184T	P	000444	---	---	---
3008	AGITATOR MOTOR	7.50	1785	3	460	---	2.1	---	182TC	P	000439	---	---	---
3008	LEAD KILL TANK AGITA	7.50	1785	3	460	---	2.1	---	182TC	P	NONE	---	---	---
3010	PUMP	.50	3450	3	230	460	1.9	1.0	48	---	000134	---	---	---
3010	AIR HANDLER	1.00	1725	3	230	460	3.4	1.7	143T	TFR-BE	000474	---	---	---
3012	AIR HANDLER	.75	1785	3	460	---	2.1	---	182T	P	000089	---	---	---
3012	AGITATOR MOTOR	.75	1785	3	460	---	2.1	---	182TC	P	NONE	---	---	---
3012	EXHAUST FAN MOTOR	2.00	1725	3	460	---	3.1	---	182T	P	NONE	---	---	---
3014	HOPPER MOTOR	.50	1720	3	208	440	2.8	2.6	1.3	JF-GW	000818	---	---	---
3014	PACK HOUSE KILL TANK	.75	1785	3	460	---	2.1	---	182TC	P	001574	---	---	---
3014	AIR HANDLER	2.00	1715	3	230	460	5.8	2.9	145T	TER-BE	000868	---	---	---
3014	EXHAUST FAN	3.00	1745	3	460	---	4.6	---	182T	P	000825	---	---	---
3014	SAW DUST BLOWER MTR	5.00	1730	3	230	460	13.6	6.8	184T	T	NONE	---	---	---
3015	CIRCULATING PUMP	.50	3450	3	230	460	2.0	1.0	---	P	000507	---	---	---
3015	PUMP MOTOR	.50	3450	3	230	460	2.0	1.0	---	P	000521	---	---	---
3015	SODIUM NITRITE FEED	.75	1785	3	460	---	2.1	---	182T	P	000585	---	---	---
3015	PREPRA AREA KILL TNK	.75	1785	3	460	---	2.1	---	182TC	P	001568	---	---	---
3015	SODA ASH FEED PUMP N	.75	1785	3	460	---	2.1	---	182T	P	000589	---	---	---
3015	SODIUM NITRATE PUMP	.75	1785	3	460	---	2.1	---	182T	P	000589	---	---	---
3015	SODIUM NIT TANK AGIT	1.00	1165	3	460	---	1.8	---	182TC	P	001566	---	---	---
3015	SODA ASH TRANS MOTOR	1.00	1780	3	460	---	2.1	---	182T	P	000587	---	---	---
3015	SODA ASH SOLE MIX	1.50	1155	3	460	---	2.5	---	182TC	P	001567	---	---	---
3015	SERV AREA SUP FAN	3.00	1730	3	230	460	8.4	4.2	182T	TFS-BE	000867	---	---	---
3015	PREPARA AREA SUP FAN	3.00	1745	3	460	---	4.6	---	182T	P	000812	---	---	---
3015	PUMP-PRECIP WEST BAY	5.00	1200	3	220	440	15.8	7.9	---	AVE-254U	000566	---	---	---
3015	HYDRAULIC PUMP MOTOR	5.00	1200	3	220	440	15.8	7.9	---	AVE-254U	000565	---	---	---
3015	PUMP-PRECIP EAST BAY	5.00	1200	3	220	440	15.8	7.9	---	AVE-254U	000564	---	---	---
3015	TROLLEY CAR MOTOR	5.00	1590	3	230	460	5.8	2.9	182T	D	NONE	---	---	---
3015	LEAD ACETATE MIX TNK	5.00	1740	3	460	---	6.8	---	184T	P	000859	---	---	---
3015	LEAD AZIDE TRANSFER	5.00	3485	3	460	---	7.0	---	184T	P	000511	---	---	---
3015	PREPARA AREA SUP FAN	7.50	1760	3	460	---	10.5	---	213T	P	000813	---	---	---
3015	PRECIP AREA EXHAUST	7.50	1760	3	460	---	10.5	---	213T	P	000810	---	---	---
3015	LEAD ACETATE FEED	7.50	3505	3	460	---	10.3	---	213T	P	000518	---	---	---
3015	LEAD ACETATE FEED	7.50	---	3	460	---	10.5	---	213T	P	000517	---	---	---
3015	PUMP MOTOR	10.00	3510	3	460	---	12.0	---	215T	P	000523	---	---	---
3016	EXHAUST FAN MOTOR #2	.33	1710	1	115	220	7.8	3.9	56	---	000522	---	---	---
3016	EXHAUST FAN MOTOR #3	.33	1725	1	115	230	5.6	2.8	56	---	---	---	---	---
3016	EXHAUST FAN MOTOR #4	.33	1725	1	115	230	5.6	2.8	56	---	---	---	---	---
3016	ADD MIX TNK AGITATOR	.50	1725	3	230	460	3.0	1.5	L56C	P	001164	---	---	---
3016	PRECOAT MIX TNK AGIT	.50	1725	3	230	460	3.0	1.5	L56C	P	001160	---	---	---
3016	FLUID PUMP DRIVE	.50	1790	3	460	---	1.9	---	182TY	P	001106	---	---	---
3016	PUMP	.50	1790	3	460	---	1.9	---	182TY	P	001109	---	---	---
3016	EXHAUST FAN MOTOR	.50	1790	3	460	---	2.7	1.4	56C	M	NONE	---	---	---
3016	ROLL UP DOOR	.75	345	3	230	460	2.7	1.4	56C	M	NONE	---	---	---
3016	SOUTH DOOR MOTOR	.75	345	3	230	460	2.5	1.4	56C	M	NONE	---	---	---
3016	SOD NITRITE TNK AGIT	1.00	1160	3	230	460	3.8	1.9	184	C1XC	001239	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1725	3	230	460	3.6	1.8	TD56	FS	NONE	---	---	---

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
3016	EXHAUST FAN MOTOR	1.00	1725	3	230	460	---	TD56	FS	NONE	---	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1725	3	230	460	---	TD56	---	NONE	---	---	---	---
3016	PUMP	1.00	1735	3	230	460	---	143T	P	000143	---	---	---	---
3016	PUMP MOTOR	1.00	1780	3	460	---	2.2	182T	P	001196	---	---	---	---
3016	ADD MIX PUMP DRIVE	1.00	1780	3	460	---	2.2	182T	P	001161	---	---	---	---
3016	EXHAUST FAN MOTOR	1.00	1780	3	460	---	2.2	182T	P	---	NONE	---	---	---
3016	#1 EXHAUST FAN MOTOR	1.00	1780	3	460	---	2.2	182T	P	---	NONE	---	---	---
3016	AIR HANDLER MOTOR	1.50	1725	3	460	---	2.5	182T	P	---	NONE	---	---	---
3016	SOD ADD MIX TNS AGIT	1.50	1730	3	230	460	---	5.6	145	---	---	---	---	---
3016	A/C DROWNING TANK	1.50	1735	3	460	---	2.5	182T	P	001214	---	---	---	---
3016	NORTH PUMP MOTOR	1.50	1755	3	460	---	2.5	182T	P	001114	---	---	---	---
3016	A/C DROWN TANK PUMP	1.50	1755	3	460	---	2.5	182T	P	001240	---	---	---	---
3016	EXHAUST FAN MOTOR	1.50	1755	3	460	---	2.5	182T	P	001115	---	---	---	---
3016	AIR HANDLER MOTOR	1.50	1755	3	460	---	2.5	182T	P	000148	---	---	---	---
3016	NORTH PUMP MOTOR	1.50	1755	3	460	---	2.5	182T	P	---	NONE	---	---	---
3016	OVERHEAD HOIST	1.50	1800	3	220	440	---	4.8	182T	P	001244	---	---	---
3016	OVERHEAD HOIST	1.50	1800	3	220	440	---	4.8	182T	P	001243	---	---	---
3016	C.M.C. HEELS TRANSF	1.50	3530	3	460	---	2.6	182T	P	001226	---	---	---	---
3016	EXHAUST FAN MOTOR	2.00	1755	3	460	---	3.1	182T	P	---	NONE	---	---	---
3016	2ND CLEAR LIQUID STO	2.00	3520	3	460	---	5.8	182T	P	001204	---	---	---	---
3016	#2 MOTHER LIQUOR STO	2.00	3520	3	460	---	5.8	182T	P	001201	---	---	---	---
3016	#1 MOTHER LIQUOR STO	2.00	3520	3	460	---	5.8	182T	P	001199	---	---	---	---
3016	AIR HANDLER MOTOR	3.00	1725	3	460	---	4.6	182T	P	---	NONE	---	---	---
3016	PROCESS CONDEN PUMP	3.00	1745	3	460	---	4.6	182T	P	001187	---	---	---	---
3016	AUTOCLAVE AGITATOR	3.00	1745	3	460	---	4.6	182T	P	001107	---	---	---	---
3016	ANALYSIS #1	3.00	3505	3	460	---	4.6	182T	P	001143	---	---	---	---
3016	C.M.C. SOLN. STG. #1	3.00	3505	3	460	---	4.6	182T	P	001229	---	---	---	---
3016	ANALYSIS #2	3.00	3505	3	460	---	4.6	182T	P	001144	---	---	---	---
3016	C.M.C. SOLN. STG. #2	3.00	3505	3	460	---	3.6	182T	P	001228	---	---	---	---
3016	PRODUCT SOLUTION	3.00	3505	3	460	---	4.6	182T	P	001195	---	---	---	---
3016	PROD SOLUTION PUMP	3.00	3505	3	460	---	4.6	182T	P	001140	---	---	---	---
3016	SODIUM AZIDE TRANS	3.00	3505	3	460	---	4.6	182T	P	001216	---	---	---	---
3016	PUMP MOTOR	3.00	3505	3	460	---	4.6	182T	---	001232	---	---	---	---
3016	PUMP DRIVE	5.00	1165	3	230	460	---	16.0	8.0	---	215T	P	000865	---
3016	PUMP DRIVE	5.00	1165	3	230	460	---	16.0	8.0	---	215T	P	000866	---
3016	#2 EVAPORATOR AGITAT	5.00	1740	3	460	---	6.8	184T	P	001177	---	---	---	---
3016	HN03 TANK UNLOADING	5.00	1740	3	230	460	---	13.6	6.8	---	184T	P	---	---
3016	HN03 TRANSFER PUMP	5.00	1740	3	460	---	6.7	215	PM	---	---	---	---	---
3016	HEELS TANK AGITATOR	5.00	1740	3	460	---	6.8	184T	P	001168	---	---	---	---
3016	#1 EVAPORATOR AGITAT	5.00	1740	3	460	---	6.8	184T	P	001124	---	---	---	---
3016	AIR COMPRESSOR DRIVE	5.00	1740	3	460	---	6.8	184T	P	000146	---	---	---	---
3016	UNLOADING PUMP	5.00	1740	3	230	460	---	13.6	6.8	---	184T	P	001232	---
3016	AUTOCLAVE MOTOR	5.00	1745	3	460	---	4.6	182T	P	001338	---	---	---	---
3016	AL-TK. UNLOAD PUMP	5.00	3525	3	460	---	7.0	213	P	000152	---	---	---	---
3016	TRANSFER PUMP MOTOR	5.00	3525	3	440	---	7.0	213	P	000151	---	---	---	---
3016	SULFURIC ACID PUMP	5.00	---	3	230	460	---	13.6	6.8	---	184T	P	000145	---
3016	AMMONIA ABSORBER	7.50	1760	3	460	---	10.5	213T	P	001151	---	---	---	---
3016	AIR HANDLER MOTOR	7.50	1760	3	460	---	10.5	213T	P	001254	---	---	---	---
3016	NH3 COMPRESSOR	7.50	1760	3	230	460	---	21.0	10.5	---	213T	P	000140	---
3016	AIR HANDLER MOTOR	7.50	1760	3	460	---	10.5	213T	P	001260	---	---	---	---
3016	OIL PUMP MOTOR	10.00	1725	3	220	440	---	28.0	14.0	---	213T	P	001234	---
3016	KILL TANK #1 AGITAT	10.00	1750	3	440	---	12.6	215T	---	---	---	---	---	---

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
 KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
3016	KILL TANK #2 AGITAT	10.00	1750	3	460	12.8	215T	-----	001236	-----	-----	-----	-----	-----
3016	ELECTRIC PLANT	10.00	1800	1	115	230	54.4	-----	000092	-----	-----	-----	-----	-----
3016	STRIPPED LIQUOR STOR	10.00	3510	3	460	12.0	215T	P	001157	-----	-----	-----	-----	-----
3016	AIR HANDLER MOTOR	15.00	1765	3	460	19.5	254T	P	001253	-----	-----	-----	-----	-----
3016	10% SOLN. STG. #3 E.	15.00	3515	3	460	19.0	254T	P	001210	-----	-----	-----	-----	-----
3016	10% SOLN. STG. #1	15.00	3515	3	460	19.0	254T	P	001212	-----	-----	-----	-----	-----
3016	HYDRAULIC PUMP DRIVE	20.00	1160	3	460	26.0	286T	P	NONE	-----	-----	-----	-----	-----
3016	AIR HANDLER MOTOR	25.00	1770	3	230	460	66.0	33.0	-----	NONE	-----	-----	-----	-----
3016	OIL PUMP DRIVE NORTH	30.00	3515	3	460	37.0	284T	P	001132	-----	-----	-----	-----	-----
3016	OIL PUMP DRIVE SOUTH	30.00	3515	3	460	37.0	286TS	P	001129	-----	-----	-----	-----	-----
3016	AIR HANDLER	50.00	1770	3	230	460	116.	58.0	236T	TFS-RE	001293	-----	-----	-----
3017	EXHAUST FAN DRIVE	.75	1725	1	115	250	10.8	5.4	H56	K	NONE	-----	-----	-----
3017	PUMP MOTOR	7.50	1760	3	460	10.5	213T	P	000877	-----	-----	-----	-----	-----
3017	BRINE CIRCULATE PUMP	7.50	1760	3	460	10.5	213T	P	000878	-----	-----	-----	-----	-----
3017	#1 SOD REFRIG MACH	100.0	1775	3	460	10.5	213T	P	000886	-----	-----	-----	-----	-----
3017	#2 SOD REFRIG MACH	100.0	1775	3	460	11.4	405T6	P	000873	-----	-----	-----	-----	-----
3017	LED AZD COOL TWR #1	25.00	3600	3	460	114.	406T6	P	000874	-----	-----	-----	-----	-----
3017	LED AZD COOL TWR #2	25.00	3600	3	460	30.1	324UPH	JU	NONE	-----	-----	-----	-----	-----
3017	LEAD AREA REFRIG	40.00	1770	3	460	30.1	324UPH	JU	NONE	-----	-----	-----	-----	-----
3017	PUMP MOTOR	40.00	3545	3	460	50.0	324T	P	000885	-----	-----	-----	-----	-----
3017	PUMP MOTOR	40.00	3545	3	460	50.0	324TS	P	000883	-----	-----	-----	-----	-----
3017	SOD AZD COOL TWR PMP	50.00	1800	3	460	50.0	324TS	P	USA 884	-----	-----	-----	-----	-----
3018	#1 SODIUM COOLING	15.00	1730	3	230	460	59.3	-----	NONE	-----	-----	-----	-----	-----
3019	FAN MOTOR	15.00	1750	3	230	460	35.0	17.5	365UP	JU	000900	-----	-----	-----
3020	FAN MOTOR	7.50	1750	3	230	460	19.0	9.5	-----	000903	-----	-----	-----	-----
3021	FAN REF. MOTOR	.33	1625	1	230	460	1.6	-----	-----	000902	-----	-----	-----	-----
3022	FAN REF. MOTOR	.33	1625	1	230	460	1.6	-----	-----	000901	-----	-----	-----	-----
3032	Liquid NITROGEN PUMP	1.50	1275	3	230	460	6.8	3.4	VM1452	NONE	-----	-----	-----	-----

APPENDIX E

ACTIVE MOTORS SORTED BY INCREASING ANNUAL ELECTRICITY COST -
BUILDING NUMBERS BELOW 999

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COSF
203	HIGH SPEED GRINDER	-----	30000	1	115 -----	2.5 -----	-----	-----	ST280	115	2.5	1.7	100	1
202	RIVET SET	.33	1725	1	115 -----	5.6 -----	562	S	78046	115	5.6	5.1	50	1
207	BRICK SAW MOTOR	1.50	3450	1	115 230	9.1 -----	56	-----	92595	230	9.1	5.3	50	1
106	BENCH GRINDER	.33	3450	1	115 -----	4.2 -----	320C	-----	NONE	115	4.2	3.0	50	1
202	WATER COOLER	-----	-----	1	115 -----	4.2 -----	-----	-----	092079	115	4.2	3.5	50	1
247	WATER COOLER	-----	-----	1	115 -----	4.0 -----	-----	-----	87457	115	4.0	2.9	100	1
202	OSCILLATING FAN	-----	-----	1	115 -----	0.7 -----	-----	-----	96196	115	0.7	0.9	100	1
202	BORING BAR	.50	3450	1	115 -----	6.0 -----	-----	-----	68899	115	6.0	8.6	50	1
203	WATER COOLER MOTOR	-----	-----	1	115 -----	3.4 -----	-----	-----	65475	115	3.4	2.3	100	1
202	OSCILLATING FAN	-----	-----	1	110 120	0.7 -----	-----	-----	-----	115	0.7	0.9	100	1
202	BENCH GRINDER	.50	3450	1	110 -----	1.3 -----	-----	-----	083700	115	0.7	0.9	100	1
202	BENCH GRINDER	.33	3450	1	115 -----	4.1 -----	-----	-----	45042	115	1.2	1.9	100	1
202	OSCILLATING FAN	-----	-----	1	110 120	0.7 -----	-----	-----	67174	115	4.1	3.9	50	1
052	BENCH GRINDER	-----	-----	1	110 115	4.6 -----	-----	K	283625	115	0.7	0.9	100	1
104	CONDENSATE PUMP	.75	3450	3	208 230	4.60 -----	36	-----	12747	115	4.6	3.6	100	2
203	BALDOR GRINDER	.50	3450	1	115 -----	4.8 -----	153C	-----	97902	208	2.8	1.8	100	2
324	PEDESTAL GRINDER	.50	3450	1	115 -----	5.0 -----	-----	-----	87488	115	4.8	3.3	100	2
053	TENSILE TEST MACHINE	.33	1000	1	220 440	1.4 -----	153M	-----	74199	208	1.5	0.7	100	2
202	HONING MACHINE	.50	1725	1	115 230	6.4 -----	G56C	KFU3	93550	115	6.4	2.6	100	2
203	ROCKWELL DRILL PRESS	.50	1725	3	230 460	8.8 -----	56	-----	97394	115	8.8	7.5	50	2
324	GRINDER	.33	3450	1	115 -----	1.6 0.8	-----	510M	089692	208	1.8	1.0	100	2
053	CONDENSATE PUMP	.50	1735	3	208 416	0.7 -----	-----	-----	90590	115	5.3	4.5	100	2
207	B" JOINTER	1.00	3450	3	200 -----	1.6 -----	-----	45511	208	1.6	0.6	200	2	
736	AIR HANDLER MOTOR	.50	1725	3	208 -----	3.7 -----	C56	TF	98368	208	3.6	2.7	50	2
951	CONVEYOR DRIVE MOTOR	.33	1725	3	220 -----	1.6 -----	-----	74203	208	1.6	1.1	104	2	
203	AIR COND FAN MOTOR	.33	1100	1	208 230	1.4 -----	ZP	FS	26930	208	1.4	1.3	100	2
202	BENCH GRINDER	.50	3450	3	208 -----	1.5 -----	DU48	FLL	96479	230	1.5	1.4	200	2
202	WATER COOLER	-----	-----	1	115 -----	4.0 -----	-----	VHA	13174	208	1.5	1.0	100	2
203	GRINDER BUFFER	.50	3450	1	115 -----	5.0 -----	-----	-----	83511	115	4.0	3.5	100	2
203	BUFFER/MOTOR	.50	3450	1	115 -----	5.0 -----	5324C	-----	089243	115	5.0	2.7	100	2
202	DRILL PRESS	.50	1140	3	208 -----	1.9 -----	5324C	-----	89244	115	5.0	2.4	100	2
951	CIRCULATING PUMP MTR	.50	1725	3	208 440	1.4 -----	75D	K	75364	208	1.9	1.5	100	2
203	PEDESTAL GRINDER	.33	3600	1	115 -----	4.5 -----	35	TA	69316	208	1.4	1.4	100	2
243	WATER COOLER	-----	-----	1	115 -----	4.0 -----	-----	-----	19659	115	4.5	3.2	100	2
203	DRILL PRESS	.33	1740	3	220 -----	4.0 -----	5324C	-----	70833	115	4.2	3.6	100	2
202	FORKLIFT HOIST	1.50	1725	3	208 230	460 5.0	1.2 -----	PAB8	45543	208	1.3	1.0	100	2
203	WATER COOLER MOTOR	-----	-----	1	115 -----	4.0 -----	56C	-----	97910	208	5.0	3.1	50	2
203	AIR CONDITIONER	-----	-----	1	208 230	9.3 B.6	-----	-----	65449	115	4.0	3.5	100	2
207	BENCH GRINDER	.50	3450	1	115 -----	4.8 -----	153C	-----	96478	208	9.3	1.8	100	2
253	SUMP PUMP MOTOR	.33	-----	1	115 -----	5.0 -----	-----	-----	NONE	115	4.8	3.5	100	3
203	GRINDER/MOTOR	1.00	3500	3	208 220	440 2.7	56R	-----	97892	208	2.7	1.7	100	3
058	CONDENSATE PUMP	.75	3450	3	208 230	460 1.3	56	-----	95133	208	2.6	1.2	200	3
202	DRILL PRESS	.33	1740	3	230 -----	2.6 -----	1.3	115	04547	-----	-----	1.0	200	3
207	BENCH GRINDER	.50	3450	1	115 -----	5.8 -----	D56Y	KN	092148	115	5.8	4.3	100	3
202	DRILL PRESS	.50	1125	1	115 230	7.6 3.8	-----	K.B.	46110	115	7.6	6.1	100	3
203	TRENT MOTOR OVEN	1.00	1725	3	208 220	440 3.0	2.8	1.4	95151	208	3.0	1.7	50	3
053	OVERHEAD HEATER	.50	1075	1	115 230	5.8 2.9	K56	CC	275395	115	5.8	5.8	100	3
909	CONDENSATE PUMP	.75	1750	3	220 440	2.6 1.3	-----	RSS72	QZ	-----	2.6	1.1	100	3
102	SUMP PUMP	.33	1725	1	115 -----	10.0 -----	-----	NONE	208	115	10.0	7.0	100	3
058	SUMP PUMP	.33	1725	1	115 -----	10.0 -----	-----	NONE	208	115	10.0	6.5	100	3
057	CONDENSATE PUMP	.50	1725	3	208 416	1.6 -----	.8	-----	208	116	1.6	1.0	200	3

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST			
106	CONDENSATE PUMP	.75	3450	3	230	460	---	2.4	1.2	K56	P	NONE	208	2.5	100		
202	DELTA DRILL PRESS	.33	1725	1	110	---	6.3	---	165	SS	79153	115	6.0	5.5	100		
203	BENCH GRINDER	.33	3450	1	115	---	6.2	---	---	CR200	68028	115	6.2	5.9	100		
203	AIR HANDLER	.50	1725	1	115	230	---	7.0	3.5	63A	PFV3	275397	115	7.0	4.3	100	
052	CONDENSATE PUMP	.75	3450	3	208	220	440	2.5	1.3	656	CC	8942	115	2.5	1.2	200	
053	OVERHEAD HEATER	.50	1075	1	115	230	---	5.8	2.9	K56	---	---	115	5.8	5.7	100	
105	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	56	---	96571	208	2.6	1.2	250	
203	HEATER MOTOR	.50	1725	1	115	230	---	7.0	3.5	63A	---	8943	115	7.0	5.2	100	
053	TENSILE TEST MACHINE	.75	1725	3	230	460	---	3.0	1.5	56C	513M	94551	208	3.0	2.1	100	
203	DRILL PRESS	.50	1760	3	220	440	---	2.0	1.0	---	---	74642	208	2.1	1.4	100	
203	LATHE MOTOR	.50	1725	3	208	220	440	1.7	0.8	66	FS	74640	208	1.7	1.3	200	
203	DELTA DRILL PRESS	.75	1725	3	220	440	---	2.2	1.1	47	PA	79537	208	2.3	1.5	100	
102	PAPER PUNCH	.33	1725	1	115	---	6.2	---	F48	SPS	089852	115	6.2	6.0	100		
715A	ROCKWELL DRILL PRESS	.50	1725	3	230	460	---	1.6	.8	510M	---	89694	208	1.6	1.1	246	
203	DRILL PRESS	.50	1075	1	115	230	---	5.8	2.9	K56	---	90598	115	5.8	3.2	100	
053	OVERHEAD HEATER	.50	1075	1	115	230	---	5.8	2.9	K56	CC	NONE	115	5.8	5.9	100	
262	ICE CRUSHER	.50	1725	1	115	---	6.8	---	J56	SPS	06558	115	6.8	---	100		
203	MILLING MACH COOLANT	---	---	---	---	---	---	---	---	---	97815	---	---	0.3	1000		
209	SUMP PUMP MOTOR	.33	1725	1	115	---	10.0	---	---	---	---	NONE	115	10.0	5.8	100	
203	CONDENSATE PUMP	.75	3450	3	208	220	440	2.5	1.3	656	---	95126	208	2.5	1.9	100	
505	SUMP PUMP MOTOR	.33	1725	1	115	---	8.0	---	---	---	SP 006	115	8.0	7.9	100		
105	SUMP PUMP	.33	1750	1	110	---	10.0	---	---	---	NONE	115	9.6	8.0	100		
203	DUMORE HIGH SP DRILL	---	17000	1	115	---	8.0	---	---	---	7986	115	8.0	0.5	100		
806	SUMP PUMP	.33	1725	1	115	---	8.0	---	---	---	NONE	115	8.0	6.0	100		
104	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	A771E	NONE	115	10.0	5.8	100	
057	SUMP PUMP	.33	1725	1	115	---	10.0	---	56	---	---	115	10.0	8.5	100		
203	VACUUM PUMP	.50	1725	1	115	230	---	8.4	4.2	---	---	NONE	115	8.4	8.2	100	
231	SEWING MACHINE	---	1725	1	110	---	5.0	---	---	---	97812	115	4.8	2.3	200		
203	COIL WINDER	.50	1725	1	110	220	---	8.8	4.4	---	RM720	B-LINE	62474	115	8.4	8.7	100
202	SUMP PUMP	.33	1725	1	115	---	10.0	---	56	---	---	NONE	115	10.0	8.5	100	
203	DISC SANDER	.50	1725	1	115	230	---	8.6	4.3	56	---	91041	115	8.6	4.5	100	
203	PORTABLE PIPE THREAD	1.00	---	---	110	---	15.0	---	---	---	090689	115	14.4	9.4	100		
513	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	---	115	10.0	8.6	100		
202	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	90027	---	---	8.6	100		
904	BANDING CUTTER	.33	1800	1	115	230	---	4.6	2.3	56-4206E	---	90540	115	4.6	4.1	200	
202	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	89965	115	---	8.5	100		
202	AIR CONDITIONER	---	---	---	---	---	---	---	---	---	90022	---	---	8.9	100		
114	SUMP PUMP	.33	1750	1	110	---	10.0	---	---	---	NONE	115	9.7	8.2	100		
202	FLOOR HEATER	1.50	1740	3	220	440	---	4.6	2.3	---	---	66474	208	4.9	3.7	100	
162	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	---	NONE	115	10.0	8.0	100		
203	G.E. BUFFER	1.00	1720	3	220	440	---	3.2	1.6	203	M	---	208	3.4	2.0	200	
202	OVERHEAD HEATER	.75	1725	1	115	230	---	10.0	5.0	---	---	45717	115	10.0	5.5	100	
715A	BAND SAW	.50	1725	3	230	460	---	1.6	.8	---	510M	91059	208	1.6	1.0	360	
203	METAL ROLL	1.00	1725	3	208	230	460	3.6	1.7	143T	---	96670	208	3.5	1.0	100	
207	10" UNISAW	3.00	3450	3	230	460	---	7.4	3.7	---	620M	093077	208	8.2	3.5	50	
203	PEDESTAL GRINDER	2.00	1800	3	220	---	6.2	---	---	---	2H5AG	208	6.6	3.1	100		
203	COOLANT PUMP	.50	1725	3	208	416	---	2.0	1.0	---	---	98285	208	2.0	2.7	200	
207	ROCKWELL DRILL PRESS	.75	1725	3	208	230	460	3.0	1.5	---	513M	93576	208	3.3	2.0	100	
207	COMB BELT & DISC SAN	1.00	1730	3	208	416	---	3.2	1.6	A204	T	NONE	208	3.2	1.0	100	
247	CONDENSATE PUMP DRIV	.75	3450	3	208	220	440	2.5	1.3	G56	PFU3	NONE	208	2.5	1.9	200	
203	DELTA GRINDER	1.00	1725	3	225	440	---	2.8	1.4	182	IS	3451	208	3.0	1.6	100	
203	WELLS BANDSAW	1.00	1750	3	202	440	---	3.3	1.7	A208	---	65981	208	3.5	2.5	100	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST			
715H	CONVEYOR MOTOR	.50	1725	3	208	220 440	1.9	1.0	B56	208	1.9	1.0	384	5			
202	STEAM CLEANER PUMP	.75	1725	1	115	230 ---	13.0	6.5	F2	115	13.0	11.7	100	5			
715A	MILLING MACHINE	1.00	1800	3	220	440 ---	3.2	1.6	SCV	208	1.6	1.7	246	5			
202	BENCH GRINDER	1.00	1800	1	110	115 ---	13.0	---	C	115	13.0	10.5	100	6			
202	FLOOR HEATER	1.50	1740	3	220	440 ---	4.6	2.3	41313	208	4.9	4.1	100	7			
715B	BAND SAW	.50	1725	1	115	---	8.2	---	FC	---	115	8.2	7.4	200	7		
202	BENCH GRINDER	.50	3450	1	110	---	6.2	---	118	---	115	5.9	3.5	100	7		
203	PORTABLE AIR COMPRES	1.00	3450	1	115	230 ---	15.0	7.5	56	---	115	15.0	14.2	100	7		
715E	GRINDER	.50	3450	1	115	---	5.6	---	79204	115	5.6	2.6	600	7			
324	LATHE	1.50	1735	3	208	---	5.2	---	TFR3	94055	208	5.2	4.7	100	7		
203	ROCKWELL DRILL PRESS	1.50	1725	3	230	460 ---	4.8	2.4	C66Y	TDR-BZ	093078	208	5.3	2.1	100	7	
951	CONDENSATE PUMP	.75	3450	3	208	220 440	2.5	1.3	C56	P	---	2.5	2.3	200	7		
202	BLOWER HEATER	2.00	1140	3	208	416 ---	6.6	3.3	225	208	6.6	5.0	100	7			
951	PORTABLE COOLING FAN	.33	1725	3	208	---	2.8	---	64540	208	2.8	4.7	100	7			
203	CINCINNATI CHUCK MOTOR	.50	1440	3	230	---	2.2	---	1	92766	208	2.5	2.7	200	7		
203	EXHAUST FAN WEST	1.50	1000	1	115	230 ---	18.4	9.2	184	KC	91058	115	18.4	100	8		
203	EXHAUST FAN EAST	1.50	1000	1	115	230 ---	18.4	9.2	184	KC	91058	115	18.4	100	8		
202	5TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	47251	115	5.6	6.3	300	8			
202	8TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	47252	115	5.6	7.0	300	8			
202	2ND N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	7256	115	5.6	5.3	300	8			
202	7TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	27255	115	5.6	5.3	300	8			
202	4TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	27253	115	5.6	5.3	300	8			
202	W OVERHEAD DOOR OPEN	.33	1725	1	115	---	5.6	---	NONE	115	5.6	5.1	300	8			
202	N OVERHEAD DOOR OPEN	.33	1750	1	115	230 ---	5.6	2.8	562	---	115	5.6	5.7	300	8		
202	3RD N OH DOOR OPENER	.50	1725	1	115	---	5.6	---	562	---	115	5.6	5.1	300	8		
201	EXHAUST FAN	1.50	1725	1	115	230 ---	18.4	9.2	184	KC	47254	115	18.4	100	8		
202	6TH N OH DOOR OPENER	.33	1725	1	115	---	5.6	---	562	---	115	5.6	5.5	300	8		
203	RADIAL PRESS TABLE	.50	500	3	220	440 ---	6.2	3.1	A66	SPLT	73918	208	6.6	6.1	100	9	
203	DRILL PRESS ELEV MTR	1.50	1700	3	220	440 ---	5.8	2.9	518S	CTK	71732	208	6.1	3.7	100	9	
202	CONDENSATE PUMP DRTV	.75	3410	3	208	220 440	2.5	1.3	56	PFU3	None	208	2.5	2.1	300	9	
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	---	6.1	---	J56Y	TA	92766	208	6.1	3.9	100	9	
203	ELEC INSIDE GRINDER	1.00	3450	3	220	440 ---	2.8	1.4	184T	TFL	98594	208	3.0	3.8	200	9	
057	SAW MOTOR	5.00	1730	3	230	460 ---	13.2	6.6	518S	PFU3	None	208	13.2	5.8	100	9	
207	PLANER	5.00	3600	3	208	220 440	13.2	14.4	7.2	AFO-22	P000	93604	208	13.2	9.7	50	9
203	PUMP MOTOR	.75	1150	3	220	440 ---	2.8	1.4	203	---	---	208	3.0	2.8	200	9	
202	PEDESTAL GRINDER	2.00	1800	3	220	440 ---	6.0	3.0	215	2H5AG	24868	208	6.4	3.1	100	9	
203	ELEC SHP EXHAUST FAN	1.50	1725	3	208	---	6.1	---	204	---	None	208	6.1	2.3	100	9	
715A	TOOL POLISH MOTOR #1	.75	3450	3	208	220 440	5.0	2.5	56	---	---	208	2.5	1.2	492	9	
203	GRINDER MOTOR	1.00	3400	3	208	220 440	3.6	2.8	1.4	LJX42	L	90922	208	3.6	1.5	200	9
715B	RADIAL ARM SAW	2.00	3425	3	208	240 480	5.0	2.5	---	---	89242	208	5.0	2.0	300	9	
207	ROCKWELL BANDSAW	2.00	1725	3	230	460 ---	6.0	3.0	F66Y	TDR-G7	093076	208	6.6	4.0	100	10	
203	HARDING LATHE	1.50	1700	3	208	220 ---	3.6	3.4	215	P	98545	208	3.6	3.0	200	10	
909	HEATER BLOWER	1.00	1725	3	220	440 ---	3.3	1.7	204	E15	6BB24	208	3.3	2.5	300	10	
102	CONDENSATE PUMP	.75	3450	3	208	230 460	2.6	1.3	56	---	96567	208	2.6	1.4	500	9	
243	CONDENSER FAN	.33	---	3	208	440 ---	2.3	---	---	---	269105A	B9394	208	2.3	---	300	10
243	CONDENSER FAN	.33	---	3	208	440 ---	2.3	---	---	---	269105A	B9394	208	2.3	---	300	10
904	CONDENSATE PUMP	.75	3450	3	208	230 460	2.6	1.3	56	---	96560	208	2.6	1.5	500	10	
243	CONDENSER FAN	.33	---	3	208	440 ---	2.3	---	---	---	269105A	B9394	208	2.3	---	300	10
715A	TOOL POLISH MOTOR #3	.50	1800	3	208	416 ---	2.3	1.2	---	E	---	208	2.3	1.5	492	10	
315	POWDER PRESS #1	.33	1725	3	230	460 ---	2.5	5	---	---	460	---	.5	.3	1000	10	
315	DISCHARGE CONVEYOR	.33	1725	3	230	460 ---	2.5	5	---	---	460	---	.5	.3	1000	10	
730	AIR HANDLER MOTOR	.75	1725	3	208	220 440	2.8	1.4	---	P	85874	208	2.8	1.7	416	10	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
112	WATER SOFTENER EAST	.33	1725	1	115	230	6.6	3.3	5820	RA	79256	115	6.6	3.0	500	
203	LOUIS ROCKF. SHAPER	1.00	1720	3	220	440	7.6	3.8	163	-----	64510	208	8.0	10.0	100	
203	RADIAL PRESS SPINDLE	3.00	1740	3	220	440	8.4	4.2	225	-----	73918	208	8.9	4.1	100	
203	POWER HACKSAW	3.00	1725	3	220	440	8.5	4.2	225	K	79006	208	8.9	4.5	200	
102	PAPER CUTTER	3.00	1745	3	208	440	10.4	-----	182T	SC	0928888	208	10.4	8.5	100	
203	CROSS FEED	1.00	1800	3	220	440	3.8	1.8	184	MLE	97319	208	4.0	3.8	200	
951	SUMP PIT PUMP X-RAY	.50	1725	3	208	440	1.7	-----	7240W	RA	SP 130	208	1.7	1.1	100	
203	SURFACE GRINDER	15.00	1160	3	208	440	4.5	-----	02232S	CTX	98285	208	4.5	5.0	200	
207	PORTABLE AIR COMPRES	1.00	1725	1	115	230	14.0	7.0	182	-----	90682	115	14.0	11.1	200	
247	PORT AIR COMPRESSOR	-----	1725	1	115	230	14.0	7.0	182	CDR-LF	090692	115	14.0	13.5	200	
715A	TOOL POLISH MOTOR #2	1.50	1710	3	230	460	4.8	2.4	-----	L	-----	208	4.8	2.0	492	
203	DO-ALL BANDSAW	2.00	-----	3	230	460	9.0	-----	-----	-----	906599	208	9.5	4.5	100	
311	CONDENSATE MOTOR	.75	3450	3	230	440	2.6	-----	-----	-----	965770	208	2.6	1.3	700	
324	GRINDER	.50	3450	3	208	440	2.0	-----	-----	-----	90535	208	2.0	1.9	500	
204	DRILL PRESS	2.00	1725	3	208	220	440	5.8	2.9	224	TS	78623	208	5.8	4.7	200
203	WEBB METAL ROLL	3.00	1150	3	208	220	440	10.0	5.1	213T	-----	92651	208	10.0	6.5	100
325	DELVO PUMP MOTOR	1.50	1725	3	208	220	440	4.6	4.6	2.3	-----	208	4.6	3.4	200	
325	#2 CONDENSER FAN	.33	-----	3	208	220	440	2.1	-----	-----	-----	89393	208	2.1	1.9	500
058	AIR HANDLER MOTOR	.75	1725	1	115	230	10.4	5.2	-----	H56	RK-3	85887	115	10.4	-----	300
112	WATER SOFTENER WEST	.33	1725	1	115	230	6.6	3.3	5820	RA	79255	115	6.6	3.6	500	
717	SHAKE MOTOR	1.00	1725	1	115	230	13.8	6.9	-----	-----	6121	115	13.8	9.0	200	
203	NORTON CHUCK MOTOR	.75	1135	3	220	440	5.1	2.6	203	K	75458	208	5.4	3.7	200	
809	BLOWER MOTOR	3.00	1750	3	220	440	8.4	-----	225	RP-1	-----	208	8.4	3.5	300	
324	DRILL PRESS	1.00	1130	3	220	440	3.4	1.7	-----	-----	77008	208	3.4	2.0	500	
315	POWDER PRESS DISCHRG	.33	1725	3	230	460	2.5	-----	-----	-----	460	208	.5	100	16	
203	PIPE THREADER	3.00	-----	3	220	460	5	-----	-----	-----	96433	208	-----	11.3	100	
315	CONVEYOR SWAGE MACH #1	.33	1725	3	230	460	1.5	6	-----	P	-----	460	.6	.5	1000	16
315	CONVEYOR DISCHARGE	.33	1725	3	230	460	1.2	6	-----	-----	-----	460	.6	.5	1000	16
315	CONVEYOR ULTRA ASSY	.33	1725	3	230	460	1.2	6	-----	-----	-----	460	.6	.5	1000	16
315	ASSEMBLY DISCHARGE	.33	1725	3	230	460	1.2	6	-----	-----	-----	460	.6	.5	1000	16
315	BODY CONVEYOR #1	.33	1725	3	230	460	1.2	6	-----	P	-----	460	.6	.5	1000	16
315	CONV CONE HOPPER	.33	1725	3	230	460	1.5	8	-----	-----	-----	460	.8	.5	1000	16
315	DRV SYNTRON TO SWAGE	.33	1725	3	030	460	1.5	6	-----	-----	-----	460	.6	.5	1000	16
315	CONV ASSY DISCHARGE	.33	1725	3	230	460	1.2	6	-----	-----	-----	460	.6	.5	1000	16
315	CONV FEED CLEANER #1	.33	1725	3	230	460	1.5	.8	-----	-----	460	.8	.5	1000	16	
207	ROCKWELL RADIAL SAW	3.00	3450	3	230	460	8.2	4.1	56Y	TS	993079	208	9.1	4.5	100	
325	#1 CONDENSER FAN	.33	-----	3	208	240	2.1	-----	-----	-----	89393	208	2.1	2.5	200	
808	BOILER OIL FEEDER	.33	1725	3	115	208	230	6.0	3.0	56C	-----	68754	115	6.0	7.0	300
203	FEED MTR MILL MACH	2.00	1730	3	208	220	440	6.0	3.0	184	K	94688	208	6.0	13.6	200
203	MILLING MACH TABLE	-----	-----	3	230	460	1.8	.9	48	-----	-----	208	2.0	2.2	1000	18
058	AIR HANDLER MOTOR	.33	3450	3	230	460	1.5	6	-----	-----	-----	460	.6	1.3	1500	18
315	CONV DISASSY TO SWAG	.33	1725	1	115	220	440	1.9	1.0	56	-----	088520	208	1.9	1.8	750
112	DRYER @88518	.50	1725	3	208	220	440	1.9	1.0	F56	KD	98539	115	14.0	13.9	300
202	CAR WASHER	1.00	1725	1	-----	-----	14.0	-----	-----	-----	-----	460	.7.5	.6	1000	19
315	CONV UNTRAY TO ASSY	.33	1725	3	230	460	1.5	7.5	-----	-----	-----	460	1.1	.6	1000	19
315	ASSEMBLY MACHINE	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.6	1000	19
203	BAND SAW	1.00	3450	3	220	460	3.2	-----	204	PM	76744	208	3.4	2.6	500	
315	CONV SYNTRON TO SWAG	.33	1725	3	230	460	1.5	.6	-----	-----	-----	460	.6	.6	1000	19
315	DRV DISASSY TO SWAG	.33	1725	3	230	460	1.5	.6	-----	-----	-----	460	.6	.6	1000	19
315	CONV FEED GAGE MACH	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	.8	.6	1000	19
315	AIR COMPRESSOR	.33	1725	1	115	230	5.2	2.6	-----	CS	-----	115	5.2	5.4	800	20
951	RING CONVEYOR MOTOR	3.00	1160	3	208	440	9.3	-----	254	ES	42086	208	9.3	7.1	200	

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KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
107	HOT WTR RETURN PUMP	.50	1750	3	208	230	460	.9	-----	NONE	208	1.8	1.5	1000		
202	HEATER FAN MOTOR	.75	1725	3	208	416	2.5	1.3	-----	71927	208	1.3	1.5	1000		
203	PEDESTAL GRINDER	5.00	1750	3	220	-----	13.2	-----	GPEA	63931	208	14.0	6.5	100		
203	GRINDER MOTOR	2.00	3450	3	208	220	6.8	6.0	2040	LB	95589	208	6.8	4.0		
247	PAINT BOOTH WTR PUMP	5.00	1740	3	200	-----	15.0	-----	184T	-----	-----	14.5	14.6	100		
312	CONDENSATE PUMP	.75	3450	3	208	230	460	2.6	1.3	-----	96565	208	2.6	1.8	700	
325	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.6	1.3	-----	96562	208	2.6	2.0	700	
315	NORTH CONDENSATE MTR	1.50	3450	3	200	-----	4.4	-----	-----	CS	NONE	208	4.4	2.4	700	
315	GAGING MACH FEED CON	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	.8	.7	1000	
315	POWDER CONV DRIVE	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.7	1000	
315	TRAYING CONVEYOR	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	1.1	.7	1000	
315	DISASSEMBLY DRIVE	.50	1725	3	230	460	2.2	1.1	-----	N203	-----	208	3.2	1.9	500	
203	OH AIR HANDLER WEST	1.00	1725	3	220	440	3.0	1.5	-----	-----	-----	460	.8	.7	1000	
315	SYNTRON BOWL #1	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	1.1	.7	1000	
315	DISASSEMBLY DRIVE #1	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	.8	.7	1000	
715B	RIDGE PIPE VICE	-----	1	115	-----	-----	-----	-----	-----	-----	97937	115	-----	8.1	615	
315	CONV DRV FEED CLEAN	.33	1725	3	230	460	1.5	.8	-----	P	-----	460	.8	.7	1000	
315	MAIN ASSEMBLY #1	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.7	1000	
203	REL ROCKFORD LATHE	5.00	1750	3	220	440	14.4	7.2	-----	CB254	-----	208	15.2	5.5	100	
315	CONV UNTRAY TO ASSY	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	.8	.7	1000	
315	GAGING DRIVE MOTOR	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.7	1000	
315	CONV - CONE HOPPER	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	.8	.7	1000	
305	CONDENSATE MOTOR	1.50	3450	3	200	208	4.5	-----	-----	SC	NONE	208	4.5	2.5	700	
203	NIGARA SHEARS	5.00	1735	3	220	440	15.8	7.9	-----	60205	OZA	68680	208	16.7	15.1	
744	BOX FAN	1.50	1740	3	230	460	4.8	2.4	-----	L	-----	460	2.4	1.7	984	
052	OVERHEAD HEATER	.75	1725	1	115	230	10.4	5.2	-----	73A	KC	-----	115	10.4	110	
315	SOUTH CONDENSATE MTR	1.50	3450	3	200	-----	4.4	-----	-----	CS	NONE	208	4.4	2.7	700	
715A	ROCKWELL LATHE	1.50	1735	3	200	-----	5.2	-----	-----	TFR-BE	94054	208	5.2	3.8	492	
315	CONV - CONE HOPPER	.33	1725	3	230	460	1.5	.8	-----	-----	-----	460	.8	1000	24	
203	BROWN & SHARP MILL	3.00	1650	3	220	440	8.6	4.3	-----	213	PSD1	97319	208	9.1	5.3	
722	CONVEYOR MOTOR	.50	1725	3	208	-----	1.3	-----	-----	-----	48228	208	1.3	.9	2016	
722	CONVEYOR MOTOR	.50	1725	3	208	-----	1.9	-----	-----	-----	62008	208	1.9	.9	2016	
053	FUEL OIL BURNER	.33	1725	1	115	230	6.0	3.0	-----	56C	VL	72792	115	6.0	2.9	
203	GRINDER MOTOR	-----	1740	3	220	440	5.8	2.9	-----	224	APK	92766	208	6.1	4.3	
202	AIR COMPRESSOR	2.00	1745	3	208	220	440	6.6	4.3	145T	SC	88940	208	6.6	4.0	
324	MILLING MACHINE	1.50	1800	3	220	440	4.6	4.4	2.2	-----	CO00	96747	208	4.6	2.8	800
202	HYDRAULIC HOIST (SO)	3.00	1140	3	220	440	9.2	4.6	-----	254	K	05946	208	9.8	6.1	200
247	STAT AIR COMPRESSOR	2.00	1800	3	220	440	6.0	3.0	-----	255-4	SES	77457	208	6.4	5.4	300
203	DRILL PRESS SPND MTR	5.00	1160	3	220	440	18.0	9.0	-----	251BL	CTA	71732	208	19.0	9.7	100
304	WEST CONDENSATE MTR	1.50	3450	3	200	208	4.4	-----	-----	SC	NONE	208	4.4	2.8	700	
324	BAND SAW	1.00	1725	3	220	440	3.2	1.6	-----	-----	65277	208	3.2	1.7	500	
202	HYDRAULIC HOIST (NO)	3.00	1140	3	220	440	9.2	4.6	-----	254	K	05947	208	9.8	5.5	200
302	CONDENSATE MOTOR	2.00	3460	3	200	-----	6.0	-----	-----	-----	NONE	208	6.0	3.0	700	
203	AIR COMPRESSOR	7.50	750	3	208	-----	20.6	-----	-----	284	OX	0104799	208	20.6	100	29
315	UNTRAYING MOTOR #2	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.9	1000	
324	CONVEYOR LEAD CUP #2	.50	1725	3	208	460	2.1	1.0	-----	-----	-----	208	2.1	.9	1500	
304	EAST CONDENSATE MTR	1.50	3450	3	200	208	4.5	-----	-----	SC	NONE	208	4.5	3.0	700	
315	TRYING TABLE	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.9	1000	
315	UNTRAY DRIVE MTR #3	.50	1725	3	230	460	2.2	1.1	-----	-----	-----	460	1.1	.9	1000	
324	CONVEYOR LEAD CUP #3	.33	1725	3	230	460	1.5	.8	-----	-----	-----	208	1.5	.9	1500	
744	W COOLING TOWER FAN	5.00	1735	3	460	-----	5.0	2.2	-----	CJ5NB	-----	460	2.2	1.8	500	
315	BODY UNTRAYING #1	.50	1725	3	230	440	2.2	1.1	-----	P	-----	460	1.1	.9	1000	

DAY AND ZIMME JN, CONTRACTOR OPERATOR
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LOCATION	FUNCTION	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
HP	RPM	PHASE									
311	HYD MOTOR	5.00	1740	3	230 460	13.0	6.5	-----	-----	13.0	6.0
325	AIR CONDITIONER	1.00	-----	3	200 -----	4.6	-----	-----	-----	4.4	4.0
107	CONDENSATE PUMP MTR	1.00	-----	3	115 -----	5.7	-----	-----	-----	5.7	5.0
102	DUPPLICATOR	.33	1725	3	230 460	2.0	1.0	-----	-----	1.0	1.00
315	CONVEYOR DRIVE #1	.50	1725	3	230 460	1.2	.6	-----	-----	.6	.5
315	#4 FEED-IN CONNOLLY	.33	1725	3	230 460	2.2	1.1	-----	-----	1.1	1.00
315	GAGING MACHINE DRIVE	.50	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#9 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#9 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
312	AIR HANDLER MOTOR	.75	1750	3	208 -----	2.5	-----	-----	41152	2.5	2.2
315	#1 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#2 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.6	-----	-----	.6	.5
315	#6 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	ASSEMBLY DRIVE MOTOR	.50	1725	3	230 460	2.2	1.1	-----	-----	1.1	1.00
315	#5 FEED-IN CONNOLLY	.33	1725	3	230 460	1.6	.8	-----	-----	.8	.5
247	AIR CONDITIONER	-----	-----	-----	-----	-----	-----	-----	-----	0.3	200
315	GAGING MACH FEEDING	.33	1725	3	230 460	1.5	.8	-----	-----	-----	-----
315	#7 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	-----	-----
315	#8 HYD MTR CONNOLLY	5.00	1730	3	230 460	14.0	7.0	-----	-----	7.0	5.0
315	#6 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#8 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#5 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
715A	GRINDER	.75	3450	1	115 230	8.2	4.1	-----	-----	115	5.3
314	MARATHON MTR PUMP #1	.75	1725	3	200 400	2.6	1.3	-----	-----	2.6	2.3
315	#3 FEED-OUT CONNOLLY	.33	1725	3	230 460	1.5	.6	-----	-----	.6	.5
315	#8 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
315	#3 FEED-IN CONNOLLY	.33	1725	3	230 460	1.5	.8	-----	-----	.8	.5
324	LEAD PRESS #3	.50	1725	3	230 460	2.2	1.1	-----	-----	2.2	1.0
203	WEST ROCKFORD SHAPER	7.50	1165	3	220 440	21.0	10.5	324	-----	22.2	16.0
324	LATHE	7.50	1735	3	220 440	20.1	10.0	-----	-----	20.1	15.0
305	FUZE CUT-OFF	.33	1725	1	115 230	7.0	3.5	-----	96884	20.1	7.0
305	CORNER CHAIN BUCKET	.75	1725	3	230 460	2.5	1.3	-----	96820	115	7.0
308	POWDER CONVEYOR	.75	1725	3	230 460	2.5	1.3	-----	-----	460	1.3
243	AIR HANDLER BLOWER	3.00	3460	3	208 220	440	7.6	3.8	6450B	208	7.6
203	WEBB METAL ROLL	7.50	1165	3	208 220	440	22.3	11.1	92651	208	22.3
314	FUEL OIL PUMP MOTOR	.33	1725	3	115 230	7.0	3.5	-----	97270	208	3.5
315	DRILL PRESS	.33	1725	3	208 220	1.3	-----	-----	79526	208	1.3
314	FUEL OIL PUMP MOTOR	.33	1725	3	115 230	7.0	3.5	-----	97271	208	3.5
107	AIR COMPRESSOR	.50	-----	1	115 230	8.6	4.3	4.4	-----	115	8.6
315	DISASSEMBLY DRIVE	.50	1725	3	230 460	2.2	1.1	-----	-----	460	1.1
328	COOLING TOWER FAN	1.00	1730	3	230 460	3.8	1.9	-----	-----	460	1.9
324	LEAD PRES LEAD CUP 2	.50	1725	3	230 460	2.1	1.0	-----	-----	208	1.00
311A	TEST COMPRESSION	1.00	1725	3	230 -----	4.4	-----	-----	-----	2.1	1.1
203	TRACING MIL QUILL	1.50	1700	3	208 220	440	5.1	2.6	145TY-4	208	4.4
202	N OVERHEAD HEAT FAN	1.00	1750	3	208 -----	3.2	-----	-----	41244	208	3.2
315	EXHAUST FAN	.50	1725	1	115 230	8.0	4.0	-----	98377	115	8.0
315	COOLING TOWER MOTOR	1.00	1740	3	230 460	3.8	1.7	-----	-----	460	1.9
315	#10 FEED-IN CONVEYOR	.33	1725	3	230 460	1.5	.8	-----	-----	460	.8
112	DRYER 088518	1.50	1730	3	208 220	440	1.2	-----	888519	208	4.2
315	AIR CONDITIONER FAN	.50	1075	3	230 460	3.2	1.6	-----	-----	460	1.6
3/4	AIR COMP FOR DELUGE	1.00	1725	3	208 440	4.0	1.9	-----	-----	4.0	1.0
112	DRYER TUMBLE 085770	2.00	1000	3	208 220	440	7.4	3.5	213	H	7.4

JAY AND ZIMMERMANN CONTRACTOR OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357

ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM AMPS	METER AMPS	AN HRS	AN COST			
315	CNV MTR ULTRA CLEAN	.33	1725	3	230	460	---	1.2	6	213	---	460	.6	2000			
112	DRYER TUMBLER	2.00	1000	3	208	220	440	7.4	7.0	3.5	H	085772	208	7.4	3.6		
315	ULTRASONIC CONVEYOR	.33	1725	3	230	460	---	1.5	.8	---	460	.8	2000	.6	38		
324	CONDENSATE PUMP	.75	3450	3	230	460	---	2.6	1.3	---	208	2.6	9	1.8	38		
203	CINCINNATI GRINDER	5.00	1750	3	230	460	---	13.2	12	---	GPEA	63932	208	14.0	40		
201	PAPER BALER	10.00	1745	3	230	460	---	26.0	13.0	---	215TC	97239	208	28.8	40		
716F	JONES LOADER #6	2.00	1745	3	208	---	---	6.8	6.8	---	---	CERX	88951	208	6.8	42	
203	BRAKE PRESS	10.00	1620	3	220	440	---	27.0	13.5	---	---	92655	208	28.6	5.7	42	
715A	LATH	3.00	1160	3	220	440	---	9.4	4.2	---	---	96655	208	9.4	5.9	42	
107	CHILL WATER RETURN	1.00	1725	3	208	230	460	3.4	3.2	1.6	Y56Y	SC	None	208	3.4	43	
203	NORTON GRINDER MOTOR	5.00	3460	3	220	440	---	14.2	7.1	---	225	K	75457	208	15.0	43	
716F	JONES LOADER #7	2.00	1745	3	208	---	---	6.8	6.8	---	---	CERX	88952	208	6.8	500	
315	POWDER CORNER CHAIN	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	43	
315	CORNER CHAIN BUCK RE	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	43	
112	BOILER FUEL OIL PUMP	.33	1725	3	208	220	---	1.1	1	---	56-3	TS	80256	208	1.1	43	
308	RETURN MOTOR	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	43	
308	CORNER CHAIN DRV #1	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	43	
112	DRYER TUMBLER 85768	2.00	1000	3	208	220	440	7.4	7.0	3.5	---	---	Q85771	208	7.4	4.0	43
308	POWDER CONV DRIVE	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	43	
203	PEERLESS SAW/MOTOR	5.00	1740	3	208	230	440	14.8	7.4	---	F184T	TD	96490	208	14.8	43	
102	DUPPLICATOR	.50	1725	1	115	---	8.4	8.4	8.4	---	56	---	96536	115	8.4	44	
315	#7 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	44	
315	#2 FEED-OUT CONNOLY	.33	1725	3	230	460	---	1.2	.8	---	---	P	---	460	.8	45	
315	#4 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	.8	45	
315	#5 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	.1	45	
202	AIR COMP FORKLIFT SH	5.00	1735	3	220	---	14.6	14.6	14.6	---	254	K	03727	208	15.5	45	
315	#8 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	45	
203	END MILL SPINDLE MTR	2.00	1725	3	230	460	---	6.4	3.2	---	210P	PS	96300	208	7.1	45	
315	#7 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	45	
315	AIR CONDITIONER FAN	.50	1075	3	230	460	---	3.2	1.6	---	---	P	---	460	.1	45	
315	#3 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	45	
315	#2 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	45	
315	#1 FEED-IN CONNOLY	.33	1725	3	230	460	---	1.2	.8	---	---	P	---	460	.7	45	
315	#9 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	.8	45	
315	#10 FEED-OUT CONVEY	.33	1725	3	230	460	---	1.5	.8	---	---	P	---	460	.1	45	
315	CONV MTR TRAY TABLE	.33	1725	3	230	460	---	1.5	.8	---	---	P	---	460	.8	45	
315	AIR CONDITIONER FAN	.50	1075	3	460	---	2.2	2.2	2.2	---	---	P	---	460	1.1	45	
315	#2 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	2.2	45	
315	#8 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	---	P	---	460	1.1	45	
904	VACUUM UNIT	5.00	3460	3	208	---	13.9	13.9	13.9	---	184T	CE4B	90934	208	13.9	46	
202	TRAN OH HEAT UNIT	.75	1750	3	220	440	---	2.4	1.2	---	---	P	---	78944	208	2.6	47
315	AIR CONDITIONER FAN	.50	1075	3	460	---	2.2	2.2	2.2	---	---	P	---	460	2.2	47	
209	WTR SOFT PUMP DRV MO	.50	1725	3	220	---	1.6	1.6	1.6	---	None	None	45727	208	1.7	47	
315	EAST AIR CURTAIN MTR	2.00	1165	3	230	460	---	6.6	3.3	---	---	P	---	460	3.3	48	
315	CONV - IN FEED	.75	1725	3	230	460	---	2.5	1.3	---	---	P	---	460	1.3	48	
203	OH AIR HANDLER EAST	2.00	1730	3	208	220	440	6.7	6.8	3.4	184	---	8944	208	6.7	48	
315	AIR CURTAIN MOTOR	2.00	1165	3	230	460	---	6.6	3.3	---	---	P	---	460	3.3	48	
717	CONDENSATE MOTOR	1.00	3450	3	230	460	---	3.2	1.6	---	---	TSL	96002	460	1.6	48	
726	CONDENSATE MOTOR	.75	3450	3	208	220	440	2.5	1.3	---	---	PFU3	---	208	2.5	48	
315	WEST AIR CURTAIN MTR	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96154	208	8.2	500		
302	CONDENSATE MOTOR	2.00	3460	3	200	---	6.0	6.0	6.0	---	None	None	208	6.0	52		
715I	VACUUM PUMP MOTOR	---	---	---	---	---	---	---	---	---	---	---	---	---	3.2	52	

DAY AND ZIMMERMAN CONSOLIDATED OPERATOR
KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST			
315	WEST END AIR CURTAIN	2.00	1150	3	208	220	440	8.2	7-8	3.9	182T-623M	208	8.2	7.0	500		
052	AIR COMPRESSOR	3.00	1725	3	208	416	---	8.4	4.2	---	CEIX	96153	8.4	7.5	500		
209	#2 STOCKER MOTOR	1.00	1735	3	208	220	440	3.6	3.4	1.7	182	93321	3.6	1.9	2016		
315	WEST AIR CURTAIN MTR	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	81158	8.2	7.2	500		
722	EXHAUST FAN	.50	1725	1	115	230	---	3.9	1.8	---	EN	96154	3.9	6.0	2016		
#10	TAPE FIXTUR VARI	.50	1725	3	230	460	---	2.0	1.1	---	P	92067	115	3.9	56		
315	WEST END AIR CURTAIN	2.00	1150	3	208	220	440	8.2	7.8	3.9	EN	96153	208	8.2	7.4		
#1	FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
324	TRAYING LEAD CUP #3	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
315	#7 FEED-OUT CONNOLY	.33	1725	3	230	460	---	1.5	.8	---	P	---	460	.8	57		
315	#5 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
315	#4 FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
315	#3 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
325	AIR HANDLER	1.50	1725	3	220	---	---	---	---	---	---	---	208	2.2	1.2	1500	
315	GAGING MACHINE DRIVE	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	.9	57		
#1	TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
203	TRAC MILL HYDR PUMP	3.00	1800	3	230	460	---	8.4	4.2	---	AV0-184	92295	208	9.3	1000		
315	#10 FUZE GAGING VARI	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	57		
058	AIR HANDLER MOTOR	1.50	3450	3	220	440	---	4.4	2.2	---	56	---	NONE	208	4.7	59	
904	PAINT BOOTH CONVEYOR	2.00	1800	3	208	416	---	6.4	3.2	---	224-4	SE	45764	208	6.4	59	
209	BOILER #3 STOCK DRIV	1.00	1735	3	208	220	440	3.6	3.2	1.7	182	81218	208	3.6	2.1		
053	BLOWER MOTOR	.50	1725	1	115	230	---	7.0	3.5	5.5	63A	41177	115	7.0	616		
207	TABLE SAW	5.00	3450	3	208	220	440	14.0	7.0	5.5	525	48007	208	14.0	7.5		
324	CONVEYOR LEAD CUP #3	.50	1725	3	230	460	---	2.2	1.1	---	PTB	91741	208	2.2	1.3	1500	
324	CONVEYOR LEAD CUP #2	.33	1725	3	230	460	---	1.4	.7	---	S	NONE	208	1.4	1.3	1500	
112	BOILER CHEM MIXER	.33	1725	1	115	---	5.0	---	48	---	P	---	460	5.0	63		
315	POWDER CONV DRV MTR	.50	1725	3	230	460	---	2.2	1.1	---	IS	41107	208	3.3	2.2	2016	
#9	FUZE GAGING CONLY	.50	1725	3	230	460	---	2.2	1.1	---	PTB	91741	208	4.2	4.4	64	
722	AIR HANDLER	1.00	1740	3	208	---	---	3.3	1.1	---	P	---	460	1.1	64		
203	JIG BORE SADDLE MOTO	1.00	1600	3	220	440	---	4.0	2.0	---	612	---	460	1.1	64		
315	DRIVE MTR TRAY TABLE	.50	1725	3	230	460	---	2.2	1.1	---	PTB	91741	208	4.2	4.4	64	
207	TOPS RADIAL SAW	7.50	3450	3	208	220	440	22.0	11.0	56	---	092903	208	22.0	20.0	64	
209	DRAG MOTOR	1.50	1725	3	208	220	440	4.4	4.2	2.8	56	---	70003	208	4.4	2.2	
315	#6 TAPE FIXTUR CONLY	.50	1725	3	230	460	---	2.2	1.1	---	P	---	460	1.1	64		
209	OIL PUMP MOTOR	.50	1725	1	115	230	---	7.8	3.9	5.6	---	NONE	115	7.8	7.0	2016	
715H	EXHAUST FAN	1.00	1720	3	220	440	---	3.2	1.6	---	PTB	76183	208	3.2	2.3	1968	
708	AIR HANDLER MOTOR	.50	1750	3	208	416	---	1.6	.8	---	PTB	70003	208	1.6	9	5014	
715E	RIDGID PIPE VICE	---	---	1	115	230	---	2.2	1.1	---	PTB	70003	208	1.1	9.7	66	
080	AIR COMPRESSOR	1.50	1500	3	208	416	---	4.7	2.4	59-5	SC	40999	208	4.7	4.7	66	
902	WATER PUMP SOUTH	.75	1725	3	208	220	440	2.8	2.7	1.4	F56	NONE	208	2.8	2.3	2016	
112	WASHING MACH 067222	3.00	1740	3	230	460	---	9.8	4.9	4.9	182T	GO64B	087225	208	10.9	5.6	68
724	OIL PUMP MOTOR #2	.75	1725	3	208	220	440	2.8	2.7	1.4	PF	---	208	2.8	2.3	1968	
315	E ED VARI-CROSS-OVER	.50	1725	3	230	460	---	2.0	1.0	---	P	---	208	2.0	1.1	69	
324	TRAYING LEAD CUP #2	.50	1725	3	208	416	---	4.7	2.4	59-5	SC	40999	208	4.7	4.7	69	
213	PUMP MOTOR	2.00	1725	3	208	416	---	1.5	1.4	.7	4841GM	---	NONE	208	1.5	6.0	70
739	AIR HANDLER	.50	1745	3	208	416	---	1.6	1.6	---	566	71449	115	6.0	7.5	2016	
112	WASHING MACH 087222	3.00	1745	3	208	220	440	6.7	6.4	3.2	184	COGX	087224	208	6.7	6.7	73
315	VACUUM UNIT #1	5.00	3500	3	230	460	---	13.8	6.9	---	K	95144	460	6.9	4.6	73	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	
203	MONARCH LATHE	—	3	208	—	25.0	—	—	093117	208	25.0	10.7	200	
203	MILL MACH SPINDL MTR	4.00	1730	3	220	440	—	51909	4AV-180	208	—	5.1	73	
203	SPINDLE MOTOR	10.00	1760	3	208	220	440	26.8	13.4	256U	K	94688	200	
315	VACUUM UNIT #4	5.00	3500	3	230	480	—	13.8	6.9	—	K	95146	480	
314	MARATHON MTR PUMP #2	.75	1725	3	208	400	—	2.6	1.3	—	—	—	6.9	
701	TABLETING PRESS #6	3.00	1150	3	208	220	440	9.2	8.8	4.4	P	85990	208	
701	NO. CONDENSATE PUMP	—	—	—	—	—	—	—	—	—	—	—	9.2	
902	WATER PUMP NORTH	.75	1725	3	208	220	440	2.8	2.7	1.4	F56	PF	—	
724	OIL PUMP MOTOR #1	.75	1725	3	208	220	440	2.8	2.7	1.4	PF	—	—	
701	TABLETING PRESS #4	3.00	1150	3	208	220	440	9.2	8.8	4.4	—	—	208	
703	AIR HANDLER	.50	1735	3	208	—	—	1.6	—	—	P	—	—	
209	BOLT COAL FEED CONVY	3.00	1750	3	208	—	—	14.0	—	—	—	—	208	
203	MILLIN MACHIN SPINDL	4.00	1720	3	208	—	—	13.2	—	—	254Y	—	—	
209	#1 STOCKER DRIVE MTR	1.00	1735	3	208	220	440	3.6	3.4	1.7	182TY	K	97879	
701	S. CONDENSATE PUMP	—	—	—	—	—	—	—	—	—	182	CEIX	81217	208
112	WASHING MACH 085824	5.00	1650	3	208	416	—	14.4	7.2	—	—	—	—	
711	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	P	085847	208	
705	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.6	1.3	—	—	97704	208	
209	OVERFIRE BLOW MTR #3	5.00	1740	3	220	440	—	12.8	6.4	—	—	96569	208	
951	SYNCHRONOUS CENTER	10.00	3600	3	220	440	—	82.4	—	254	EK	69188	208	
112	WASHING MACH 085824	5.00	1650	3	208	416	—	14.4	7.2	—	326	SK	78632	
730	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	—	3.8	1.9	213	P	085845	208	
744	E COOLING TOWER FAN	5.00	1735	3	460	—	—	6.6	2.8	—	—	69350	208	
112	WASHER 085746	5.00	1650	3	208	416	—	14.4	7.2	—	K	—	—	
722	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	213	P	085744	
207	SAWDUST COLLECTOR	10.00	3480	3	208	416	—	26.4	13.2	—	—	—	208	
314	BLOWER MOTOR	5.00	3460	3	208	—	—	14.2	—	284	CS	27011	208	
202	AIR COMPRESSOR	10.00	3500	3	220	440	—	25.0	12.5	—	—	97270	208	
324	HACK SAW	3.00	1725	3	220	440	—	8.5	4.2	—	284	JEX	78902	
733	AIR HANDLER MOTOR	1.00	1725	3	230	460	—	3.4	1.7	—	K	96387	208	
741	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	1.3	—	—	208	
732	AIR HANDLER	1.00	1730	3	208	220	440	3.2	1.6	—	—	98280	208	
058	AIR COMPRESSOR	3.00	1750	3	208	—	—	8.9	—	—	K	—	208	
732	CONDENSER FAN MOTOR	.33	—	—	3	208	240	—	2.3	—	225	ES	053339	
107	DUCT BLOWER MOTOR	1.00	—	—	3	208	—	4.0	—	—	—	—	208	
740	EXHAUST FAN	.50	1725	1	115	230	—	7.8	3.9	—	—	—	—	
203	LEBLOND LATHE	15.00	1745	3	220	440	—	39.2	19.6	326	—	—	91269	
311	LATHE-CUTTER	.75	1725	3	115	230	—	10.6	5.3	—	—	—	85480	
058	AIR HANDLER COMPRESS	—	—	—	—	—	—	—	—	—	—	—	208	
247	PAINT BOOTH EXHS FAN	10.00	1725	3	208	—	—	29.4	—	—	—	—	78268	
112	WASHING MACH 085824	5.00	1665	3	208	416	—	14.4	7.2	21ST	CJ4R	NONE	208	
733	CONDENSATE MOTOR	.75	3450	3	208	230	460	2.8	2.6	215	P	085849	208	
302	SCHNEIBEL FAN	3.00	1755	3	208	—	—	10.6	—	—	—	97901	208	
058	AIR HANDLER MOTOR	2.00	1735	3	208	—	—	6.8	—	145T	TDR-BE	NONE	208	
102	AIR COMPRESSOR	3.00	1750	1	110	220	—	37.2	18.6	225	RA	80155	208	
716E	JONES LOADER #9	2.00	1745	3	208	—	—	6.8	—	—	CERX	89312	208	
112	WASHING MACH 085746	5.00	1665	3	208	416	—	14.4	7.2	215	P	085745	208	
112	WASHER 085746	5.00	1650	3	208	416	—	14.4	7.2	213	P	085743	208	
112	AIR COMPRESSOR	5.00	1725	3	208	—	—	16.0	—	—	—	—	208	
314	OIL PUMP	3.00	3405	3	200	400	—	11.4	5.7	—	—	088943	203	
324	AIR CONDITION BLOWER	2.00	1720	3	200	400	—	7.1	3.6	—	—	97270	208	
701	WEST AIR COMPRESSOR	2.00	1725	3	230	460	—	6.2	3.1	—	—	—	7.1	
										L	97818	208	6.2	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST		
314	OIL PUMP	3.00	3405	3	200	400	---	11.4	5.7	200	11.4	10.3	1000	142		
328	BELL & GOSETT PUMP	2.00	1735	3	200	230	460	6.3	3.0	3.0	3.0	1500	144			
315	EXHAUST FAN #5	5.00	1745	3	230	460	---	14.6	7.3	4.5	4.5	1000	144			
716H	JONES LOADER #10	2.00	1745	3	200	---	6.8	---	SC	78277	460	7.3	5.9	1700		
315	EXHAUST FAN #3	5.00	1745	3	230	460	---	14.6	7.3	4.5	4.5	1000	144			
186	WATER PUMP MOTOR	2.00	3450	3	200	220	440	5.9	3.0	200	5.9	5.0	2016	145		
315	#7 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	2.3	2.3	2000	147			
315	N CIR PUMP/HEATER RM	1.50	1745	3	230	460	---	5.2	2.6	---	460	2.6	2.3	2000		
324	LATHE	10.00	---	3	480	---	5.5	---	---	460	460	5.5	5.0	9000		
722	EXHAUST FAN	5.00	1150	3	200	440	---	14.2	7.1	4860A	4860A	200	14.2	5.1		
315	#7 EXHAUST FAN	5.00	1745	3	230	460	---	14.6	7.3	460	7.3	4.8	1000	152		
315	EXHAUST FAN #4	5.00	1745	3	230	460	---	14.6	7.3	460	7.3	4.8	1000	152		
209	COAL PIT SHAK CONVEY	2.00	1140	3	220	440	---	6.3	3.1	225	K	09622	208	6.6	5.0	
733	AIR COMPRESSOR MOTOR	.33	1725	1	210	230	---	5.4	2.7	---	93700	115	5.4	6.8	5014	
716E	JONES LOADER #8	2.00	1745	3	200	230	---	6.8	---	---	CERX	89311	208	6.8	6.4	
315	PORT GRINDER MW SHP	1.00	1725	1	115	---	13.0	---	---	---	---	115	13.0	8.7	1000	
726	AIR HANDLER MOTOR	3.00	1750	3	208	---	8.9	---	JS	41128	208	8.9	5.7	1968		
716H	JONES LOADER #14	2.00	1745	3	208	---	6.8	---	---	---	---	208	6.8	6.6	1700	
203	ENGINE LATHE POWERTU	20.00	1750	3	220	440	---	53.6	26.8	256T	---	56.7	18.5	2000	163	
902	#3 BURNER MOTOR	7.50	1800	3	200	---	22.4	---	AFO-1200	COSO	---	22.4	11.5	1000	166	
315	SHELL WALKER	.50	1725	3	208	---	4.0	---	---	---	---	208	4.0	2.6	2000	
209	BLOWER MOTOR	3.00	3475	3	208	---	9.1	---	145T	K	None	208	9.1	5.8	2016	
741	COMPRESSOR	.75	1725	1	115	230	---	10.6	5.3	---	---	115	10.6	9.2	4028	
315	#5 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	P	---	460	3.7	2.7	2000	
315	#6 EXHAUST FAN	5.00	1745	3	230	460	---	14.6	7.3	SC	88138	460	7.3	5.4	1000	
315	EXHAUST FAN #2	5.00	1745	3	230	460	---	14.6	7.3	SC	88136	460	7.3	5.4	1000	
060	RADIAL ARM SAW	3.00	3425	3	220	440	---	14.7	---	686	---	None	208	14.7	12.0	1000
315	EXHAUST FAN #1	5.00	1745	3	230	460	---	14.6	7.3	SC	78365	460	7.3	5.5	1000	
209	BLOWER MOTOR #3	3.00	3475	3	208	---	9.1	---	145T	K	None	208	9.1	6.1	2016	
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94093	460	6.5	2.8	2000	
314	BLOWER MOTOR	5.00	3460	3	200	---	14.2	---	---	---	---	208	14.2	12.9	1000	
315	SHELL WALKER	.50	1725	3	208	---	4.0	---	---	---	---	208	4.0	2.8	2000	
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94099	460	6.5	2.8	2000	
209	BLOWER MOTOR	3.00	3475	3	208	---	9.1	---	145T	K	None	208	9.1	6.2	2016	
902	AIR COMPRESSOR	5.00	1725	3	200	416	---	16.6	7.3	184T	A	None	208	16.6	17.4	1800
112	WASHING MACH Q87222	5.00	1760	3	230	460	---	14.8	7.4	2540	GOGK	087223	208	14.8	9.7	186
315	#9 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	P	---	460	3.7	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94094	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94091	460	6.5	3.0	2000	191
315	VACUUM UNIT 3 FROM/E	5.00	3500	3	230	460	---	13.0	6.5	---	95148	460	6.9	6.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.5	6.5	---	94098	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.5	6.5	---	94514	460	6.5	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94095	460	6.5	3.0	2000	191
053	AIR HANDLER MOTOR	2.00	1735	3	200	---	6.8	---	145T	TDR-BE	96368	208	6.6	3.0	2016	
315	#10 MAIN/VARI CONLY	2.00	1730	3	230	460	---	7.4	3.7	P	---	460	3.7	3.0	2000	191
315	#6 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	P	---	460	3.7	3.0	2000	191
315	HYD PUMP MOTOR	5.00	1740	3	230	460	---	13.0	6.5	---	94090	460	6.5	3.0	2000	191
325	AIR CONDITIONER COMP	---	---	3	208	240	---	37.3	---	---	89393	208	37.3	27.0	5000	194
315	HYDRAULIC PUMP	5.00	1730	3	230	460	---	14.0	7.0	---	460	7.0	4.1	1500	196	
315	#2 MAIN DRIVE CONLY	2.00	1730	3	230	460	---	7.4	3.7	P	---	460	3.7	3.1	2000	197
315	EAST VACUUM UNIT	5.00	3500	3	230	460	---	13.0	6.9	---	95147	460	6.9	6.2	2000	197
315	BANDING CONVEYOR MTR	1.00	1725	3	208	---	6.0	---	P	---	None	208	6.0	3.1	2000	197

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LOCATION	FUNCTION	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
HP	RPM	PHASE									
904	PAINT BOOTH WTR PUMP	5.00	3500	3	208	---	13.8	---	9402	SSH	60179
722	VACUUM MOTOR	5.00	3600	3	220	---	15.8	---	---	208	95B56
315	UNIT #4 W END CONVEY	5.00	1730	3	230	460	13.5	6.5	---	---	NONE
315	HYD PUMP MOTOR	5.00	1740	3	230	460	13.0	6.5	---	---	94515
315	HYD PUMP MOTOR	5.00	1740	3	230	460	13.5	6.5	---	---	94513
315	W ED VARI-CROSS-OVER	.50	1725	3	208	---	4.0	---	---	---	---
202	BATT. A. OH EXHS FAN	---	---	3	208	---	---	---	---	---	---
314	PUMP MOTOR	10.00	1745	3	200	---	29.9	---	---	---	---
315	UNLOAD HYD PUMP #1	5.00	1730	3	230	460	14.0	7.0	---	---	460
107	CONDENSOR MOTOR	5.00	---	3	208	---	13.6	---	---	---	NONE
315	CIRCULATING PUMP	3.00	3450	3	230	460	8.4	4.2	---	---	98378
308	HYD PUMP MTR #1	5.00	1730	3	230	460	14.0	7.0	---	---	460
315	#1 MAIN DRIVE CONVL	2.00	1730	3	230	460	7.4	3.7	---	---	460
112	DRYER BLOWER Q85770	10.00	1735	3	208	220	440	28.8	27.2	215T	R
315	#B MAIN DRIVE CONVL	2.00	1730	3	230	460	7.4	3.7	---	---	460
315	#4 MAIN DRIVE CONVL	2.00	1730	3	230	460	7.4	3.7	---	---	460
112	DRYER BLOWER	10.00	1735	3	208	220	440	28.8	27.2	215T	R
315	UNLOAD HYD PUMP #2	5.00	1730	3	230	460	14.0	7.0	---	---	460
315	HYD PUMP MOTOR	5.00	1740	3	230	460	13.0	6.5	---	---	460
315	WIND BOX FAN DRIVE	5.00	1750	3	220	440	13.6	6.8	254	EX	69192
209	WASHING MACH Q85B24	7.50	1700	3	208	416	21.6	10.8	256UZ	P	085846
315	#3 MAIN DRIVE CONVL	2.00	1730	3	230	460	7.4	3.7	---	---	460
315	#4 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	460
080	SAWDUST VACUUM	5.00	1740	3	230	460	13.0	6.5	---	---	460
315	HYD PUMP MOTOR	5.00	1745	3	200	---	29.9	---	---	---	94518
315	PUMP MOTOR	10.00	1745	3	230	460	13.0	6.5	---	---	97274
315	HYD PUMP MOTOR	5.00	1740	3	208	416	21.6	10.8	256UZ	P	085846
315	WASHER Q85746	7.50	1700	3	210	416	10.8	5.0	256UZ	P	085742
112	EAST AIR COMPRESSOR	*5.0	1725	1	115	230	10.0	5.0	---	---	460
701	STACK FAN #3	7.50	1750	3	208	---	20.6	---	---	---	0120860
724	#6 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	460
315	STACK FAN #2	7.50	1750	3	208	---	20.6	---	---	---	0104800
724	AIR HANDLER	10.00	1755	3	230	460	25.2	12.6	---	---	460
717	CONDENSATE PUMP	7.50	1745	3	202	400	23.4	11.7	213T	---	NONE
112	AIR COMPRESSOR	1.00	1740	3	220	440	3.8	1.9	---	---	69358
703	#5 HYD MTR CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	460
315	#9 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	460
315	FORCED BLOWER #2	5.00	1740	3	220	440	12.8	6.4	254	EK	69190
209	HYD PUMP CONNOLLY	5.00	1740	3	230	460	13.0	6.5	---	---	460
315	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	3.8	1.9	---	---	69354
708	AIR COMPRESSOR MOTOR	1.00	1740	3	230	480	13.8	6.9	---	---	95142
315	VACUUM UNIT #3	5.00	3500	3	208	220	440	20.0	10.0	712	089352
900	RADIAL ARM SAW	7.50	3425	3	200	---	22.4	---	---	---	208
724	BURNER MTR #3 BOILER	7.50	1800	3	200	---	14.0	7.0	---	---	460
315	#3 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	93704
741	CONDENSER FAN MOTOR	1.00	---	3	208	---	5.8	---	---	---	93704
741	CONDENSER FAN MOTOR	1.00	---	3	208	---	5.8	---	---	---	93704
724	BURNER MTR #2 BOILER	7.50	1800	3	200	---	22.4	---	---	---	208
315	#2 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	---	---	460
724	BURNER MTR #1 BOILER	7.50	1800	3	200	---	22.4	---	---	---	208
112	DRYER BLOWER B5768	10.00	1735	3	208	220	440	28.8	27.2	215T	R

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
315	VACUUM UNIT #5	5.00	3500	3	230	460	13.8	6.9	K	95145	460	6.9	4.8	2000	
315	#1 HYD MOTOR CONLY	5.00	1730	3	230	460	14.0	7.0	P	-----	460	7.0	4.8	2000	
315	VACUUM UNIT #7	5.00	3500	3	230	460	13.8	6.9	K	95150	460	6.9	4.8	2000	
741	CONDENSER FAN MOTOR	1.00	-----	3	208	-----	5.8	-----	-----	93704	208	5.8	5.3	4028	
741	#7 HYD PUMP CONNOLLY	5.00	1730	3	230	460	14.0	7.0	P	-----	460	7.0	4.9	2000	
315	#10 HYD PUMP MOTOR	5.00	1730	3	230	460	14.0	7.0	P	-----	460	7.0	5.0	2000	
315	UNIT #3 W END CONVEY	5.00	1730	3	230	460	13.8	6.5	L	-----	460	6.5	5.0	2000	
314	LATHE-CHUCK	7.50	1725	3	220	440	20.1	10.0	K	95643	208	20.1	7.0	1500	
724	STACK FAN #1	7.50	1725	3	220	440	20.6	10.3	-----	60590	208	20.6	11.0	1968	
717	AIR COMPRESSOR	5.00	1725	3	230	460	14.5	7.3	L	97815	208	14.5	11.5	334	
744	WATER PUMP MOTOR	15.00	3500	3	230	460	38.0	19.0	-----	-----	460	19.0	12.4	360	
315	HYD PUM CON SWAGE #1	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	11.8	319	
315	VACUUM UNIT (WEST)	5.00	3500	3	230	460	13.8	6.9	K	95143	460	6.9	6.0	2000	
186	FEED PUMP MOTOR	5.00	1750	3	220	440	13.6	6.8	254	MLU	-----	14.4	12.5	383	
324	VACUUM UNIT HHD TEST	5.00	3500	3	230	460	13.8	6.9	-----	K	95149	460	6.9	6.1	388
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	11.6	389	
107	DUCT BLOWER MOTOR	5.00	-----	3	208	-----	16.2	-----	184T	K	COG4B	-----	14.0	404	
107	COOL DISCHRG BLOWER	5.00	1735	3	200	-----	16.3	-----	R184T	K	12150	208	14.7	407	
209	ELEVATOR MOTOR	7.50	1730	3	208	-----	14.7	-----	254	MLU	-----	14.5	2016	421	
186	BURNER MOTOR	2.00	1750	3	220	440	21.2	20.0	10.0	284	MLU	-----	21.2	433	
741	AIR HANDLER	3.00	1735	3	200	-----	9.7	-----	TDR-BE	-----	208	9.7	8.0	447	
716	AC COND. FAN NORTH	7.50	-----	3	440	-----	10.5	-----	-----	-----	440	10.5	7.7	473	
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	14.9	475	
724	AIR COMPRESSOR MOTOR	5.00	1725	3	200	-----	16.6	-----	A	-----	208	16.6	17.6	480	
739	AIR COMPRESSOR	2.00	1725	3	200	400	7.1	3.6	-----	-----	208	7.1	6.7	5014	
716	AC COND SOUTH UNIT	7.50	-----	3	440	-----	10.5	-----	-----	-----	440	10.5	8.2	504	
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	16.0	509	
315	HYDRAULIC PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	-----	460	20.0	16.9	539	
705	AC CONDENSER MOTOR	-----	-----	3	460	-----	4.6	-----	-----	93127	-----	3.4	5.4	544	
315	HYD PUMP MOTOR	10.00	1750	3	230	460	26.0	13.0	-----	RGZZ	-----	460	13.0	8.6	547
732	AIR COMPRESSOR	5.00	1725	3	230	460	14.5	7.3	-----	L	97821	208	14.5	8.7	559
315	HYD PUMP MOTOR	10.00	1755	3	230	460	27.0	13.5	-----	P	95099	460	13.5	9.0	573
315	HYD PUMP MOTOR	10.00	1755	3	230	460	27.0	13.5	-----	P	96100	460	13.5	9.0	575
315	HYD PUMP MOTOR	10.00	1755	3	230	460	27.0	13.5	-----	P	96101	460	13.5	9.1	580
315	HYD PUMP MOTOR	10.00	1755	3	230	460	27.0	13.5	-----	P	96102	460	13.5	9.2	587
315	HYD PUMP MOTOR	10.00	1755	3	230	460	27.0	13.5	-----	P	96103	460	13.5	9.2	587
315	HYD PUMP/PEL PRES #1	15.00	1765	3	230	460	40.0	20.0	-----	P	-----	460	20.0	19.0	606
902	WATER FEED PUMP	15.00	3515	3	208	-----	42.7	-----	254T	-----	208	42.7	43.5	627	
736	AIR COMPRESSOR MOTOR	1.00	1740	3	220	440	3.8	1.9	-----	-----	69351	208	3.8	4.2	5014
112	BOILER BLOWER	7.50	1750	3	220	440	19.6	9.8	284	OGX	80251	208	20.8	17.0	534
705	AIR COMPRESSOR	5.00	1725	3	230	460	14.5	7.3	L	97820	208	14.5	13.8	795	
717	CONDENSER FAN	7.50	1755	3	460	-----	10.5	-----	-----	-----	460	10.5	13.0	835	
705	AIR HANDLER MOTOR	3.00	1725	3	230	460	13.2	6.6	-----	93116	460	6.6	5.7	911	
315	HYD PUMP MOTOR	15.00	1765	3	230	460	40.0	20.0	-----	94685	460	20.0	15.0	956	
732	AC COMPRESSOR MOTOR	-----	-----	3	200	240	18.2	-----	-----	-----	208	18.2	14.4	1041	
724	WATERFEED PUMP #1	15.00	3515	1	200	-----	42.7	-----	-----	-----	208	42.7	43.8	1195	
724	WATERFEED PUMP #2	15.00	3515	3	200	-----	42.7	-----	-----	-----	208	42.7	46.2	1259	
902	AIR COMPRESSOR	25.00	1160	3	220	440	61.2	30.6	405	CS	02499	440	30.6	31.0	1399
315	HYD PUMP	10.00	1175	3	230	460	26.6	13.3	-----	-----	208	26.6	26.0	2000	1658
744	COMPRESSOR MOTOR	100.00	1770	3	230	460	240.	120.	-----	-----	460	120.0	124.0	1945	
107	REFRIG COMPRESSOR	-----	-----	3	230	460	126.	144.	57.0	-----	208	121.0	75.0	1000	2390

DAY AND ZIMMERMAN, CONTRACTOR OPERATOR
 KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
315	RELIANCE MOTOR	125.0	885	3	230	460	310.	155.	P	98376	460	155.0	172.0	1500
717	A.C. COMPRESSOR			3	460	—	132.	—		—	460	132.0	70.6	2016
744	SCHRAMM COMPRESSOR #3	100.0	1770	3	230	460	240.	120.		—	460	120.0	147.7	1000
741	COMPRESSOR MOTOR			3	208	—	106.	—		—	208	106.0	82.6	4028
716	AC COMP. SOUTH UNIT			3	440	—	132.	—		—	440	132.0	80.9	4971
744	SCHRAMM COMPRESSOR #1	100.0	1770	3	230	460	240.	120.		—	460	120.0	157.5	1000
744	SCHRAMM COMPRESSOR #4	100.0	1770	3	230	460	240.	120.		—	460	120.0	165.4	1000
716	AC COND. FAN NORTH			3	440	—	132.	—		—	440	132.0	93.0	2016
744	COMPRESSOR MOTOR	200.0	1180	3	460	—	238.	—	K	88424	460	238.0	203.0	984
744	GARD DENVER COMPRESSOR	200.0	1180	3	460	—	238.	—		—	460	238.0	198.0	1000
705	AC COMPRESSOR			3	460	—	50.0	—		—	460	50.0	43.0	5014
328	BLOCAIR COMPRESSOR	150.0	885	3	230	460	384.	192.		—	98375	460	192.0	180.0
207	LEONARD AIR COND.			—	—	—	—	—		—	—	—	9.0	1000
058	BLOWER MOTOR	.33	1725	3	220	—	1.1	—	45A	K	79478	208	1.2	—
102	EXHAUST FAN	.75	1750	1	115	230	—	10.4	C66	—	115	10.4	—	3000
058	CONDENSER FAN MOTOR	.50	1075	1	115	230	—	5.8	K56	CC	—	5.8	—	1000
203	ENGINE LATHE	.50	1725	3	208	220	440	1.6	J56	PA.	96553	208	1.6	—
058	BLOWER MOTOR	.33	1740	3	220	—	1.1	—	45A	K	79476	208	1.2	—
207	WATER COOLER			1	115	—	—	—	—	—	60815	115	—	.003
058	BLOWER MOTOR	1.00	1740	3	220	440	—	3.8	—	—	61876	208	4.0	—
203	PIPE THREADER			—	—	—	—	—	—	—	091222	—	3.8	1000
315	HYD PUMP MOTOR	5.00	1725	3	230	460	—	13.0	—	—	460	6.5	—	2000
951	FILM PROCESSOR #2			—	—	—	—	—	—	—	—	—	—	—
221	AIR CONDITIONER EAST			—	—	—	—	—	—	—	—	—	—	—
202	ARMATURE LATHE			—	—	—	—	—	—	—	—	—	—	—
904	PAINT BOOTH EXHAUST			—	—	—	—	—	—	—	—	—	—	—
203	ENGINE LATHE	1.00	1200	3	208	220	440	3.5	184C	HV	96553	208	3.5	—
208	AIR CONDITIONER			—	—	—	—	—	145T	—	93114	—	7.1	2000
203	HYDRAULIC MOTOR	2.00	1800	3	220	—	—	—	612	PTB	91741	208	4.2	—
203	JIG BORE TABLE MOTOR	1.00	1600	3	220	440	—	4.0	—	—	—	—	6.3	1000
905	SUMP PUMP			—	—	—	—	—	—	—	—	—	—	—
907	SUMP PUMP IN MANHOLE			—	—	—	—	—	—	—	—	—	—	—
203	JIG BORE SPINDLE MTR	1.00	1725	3	220	440	—	3.9	612	PT	91741	208	4.1	—
203	LUCAS MILL			—	—	—	—	—	—	—	—	—	—	—
913	DEHUMIDIFIER			—	—	—	—	—	—	—	—	—	—	—
243	COMPRESSOR MOTOR EAST			—	—	—	—	—	—	—	—	—	—	—
243	COMPRESSOR MOTOR WEST			—	—	—	—	—	—	—	—	—	—	—
915	SUMP PUMP			—	—	—	—	—	—	—	—	—	—	—
058	BLOWER MOTOR	.50	1750	—	—	—	—	—	—	—	—	—	—	—
904	SUMP PUMP			—	—	—	—	—	—	—	—	—	—	—
058	BLOWER MOTOR	.33	1725	3	220	—	1.1	—	45A	K	79481	208	1.2	—
202	VALVE REFAKER MOTOR			—	—	—	—	—	—	—	—	—	—	3000
951	COOLING UNIT FAN			—	—	—	—	—	—	—	—	—	—	—
202	VALVE REFAKER MOTOR			—	—	—	—	—	—	—	—	—	—	—
221	AIR CONDITIONER WEST			—	—	—	—	—	—	—	—	—	—	—
203	ENGINE LATHE	25.00	1760	3	220	440	—	62.6	364Y	K	96553	208	66.2	—
712	SHAKER MOTOR	.50	1735	3	208	220	—	1.2	—	—	71022	208	.4	—
909	SUMP PUMP	.75	1750	1	115	230	—	10.4	C66	—	—	—	7.1	1000
102	EXHAUST FAN			—	—	—	—	—	—	—	—	—	—	—
060	SUMP PUMP			—	—	—	—	—	—	—	—	—	—	—
816	SUMP PUMP			—	—	—	—	—	—	—	—	—	—	—
203	FAN MOTOR	1.00	3450	3	—	—	—	—	—	—	—	—	—	2.7

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
809	CONDENSATE PUMP	3	208	416	---	---	---	---	41105	---	---	---	100	---
209	CHEM FEED PUMP MOTOR	-	--	--	--	--	---	---	64558	---	---	3.4	2016	100
812	SUMP PUMP	-	--	--	--	--	---	---	---	---	---	8.3	100	---
057	PUMP MOTOR	-	--	--	--	--	---	---	98594	---	---	2.2	100	---
913	DEHUMIDIFIER	-	--	--	--	--	---	---	96182	---	---	8.8	1200	---
913	SUMP PUMP EAST DOCK	-	--	--	--	--	---	---	---	---	---	7.1	100	---
207	AIR CONDITIONER	-	--	--	--	--	---	---	---	---	---	---	200	---
201	HEATER OIL MOTOR	-	--	--	--	--	---	---	62347	---	---	---	1500	---
202	AIR CONDITIONER	-	--	--	--	--	---	---	93768	---	---	8.8	100	---
202	CONDENSATE PUMP	-	--	--	--	--	---	---	---	---	---	2.1	100	---
058	BLOWER MOTOR	.33	1725	1	230	---	3.3	FHT	NONE	230	3.3	---	300	---
902	STACK FAN MOTOR #3	5.00	1750	3	208	---	14.4	OS	02262	208	14.4	7.7	1000	---
920	SUMP PUMP	-	--	--	--	--	---	---	---	---	---	19.0	100	---
910	SUMP PUMP	-	--	--	--	--	---	---	---	---	---	8.6	100	---
203	PRESSURE PUMP TEST	.33	1725	1	115	---	6.3	---	48	---	---	6.3	100	---
203	HYDRAULIC PUMP MOTOR	-	--	--	--	--	---	---	---	---	---	63.0	100	---
203	HOIST MOTOR	-	--	--	--	--	---	---	---	---	---	4.5	100	---
208	AIR CONDITIONER	-	--	--	--	--	---	---	0368	---	---	1.0	200	---
208	AIR CONDITIONER	-	--	--	--	--	---	---	0367	---	---	1.4	200	---
208	AIR CONDITIONER	-	--	--	--	--	---	---	0365	---	---	8.0	200	---
208	AIR CONDITIONER	-	--	--	--	--	---	---	0366	---	---	1.9	200	---
052	BOILER OIL PUMP	.33	1725	1	115	208	230	6.0	56C	---	115	6.0	1500	---
208	AIR CONDITIONER	-	--	--	--	--	---	---	0369	---	---	5.2	200	---
913	SUMP PUMP	-	--	--	--	--	---	---	K	97961	440	460.0	397.0	100
744	ELECTRA COMPRESSOR	400.0	1775	3	440	---	460.	---	---	---	---	8.5	2016	24397

APPENDIX F

ACTIVE MOTORS SORTED BY INCREASING ANNUAL ELECTRICITY COST
BUILDING NUMBERS ABOVE 1000

DAY AND ZIMMERMAN CONTRACTOR OPERATOR
 KANSAS ARMY AMMUNITION PLANT, PARSONS, KS 67357
 ELECTRIC MOTOR STUDY

LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST	
1122	SUMP PUMP	.33	---	1	115	---	10.0	---	---	115	10.0	5.6	100	3.3	
1109	SUMP PUMP	.33	1720	1	115	---	8.0	---	---	115	8.0	6.5	100	3	
1109	SUMP PUMP	.33	1725	1	115	---	8.0	---	---	115	8.0	6.5	100	3	
1111	SUMP PUMP ELEVAT PIT	.33	---	1	115	---	10.0	---	---	115	10.0	6.3	100	3	
3016	SUMP PUMP	.33	---	1	110	---	---	---	---	115	---	7.5	100	3	
3015	SUMP PUMP	.33	---	1	115	---	---	---	---	115	---	8.6	100	4	
2106	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	115	10.0	8.3	100	4	
1107	SUMP PUMP	.33	1725	1	115	---	8.0	---	---	115	8.0	8.2	100	4	
2202-3	SUMP PUMP	.33	---	1	115	---	10.0	---	---	115	10.0	8.2	100	4	
3015	SUB SUMP PUMP OUT SO	.33	---	1	115	---	---	---	---	115	---	8.8	100	4	
2202-1	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	115	10.0	8.2	100	4	
3015	SUB SUMP PUMP OUT NO	.33	---	1	115	---	---	---	---	115	---	8.6	100	4	
3012	SUB SUMP PUMP	.33	---	1	115	---	8.0	---	---	115	8.0	8.6	100	4	
1111	SUMP PUMP N.E CORNER	.33	---	1	115	---	10.0	---	---	115	10.0	8.1	100	4	
2202-2	SUMP PUMP	.33	1725	1	115	---	10.0	---	---	115	10.0	7.9	100	4	
3016	SUMP PUMP	.33	---	1	110	---	---	---	---	115	10.0	8.3	100	4	
1107	CONDENSATE MOTOR	.50	1735	3	208	---	1.7	1.6	A-68	78913	208	1.7	200	5	
1407	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96239	115	8.4	360	6
1418	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96224	115	B.4	4.4	360
1402	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96238	115	8.4	360	8
1409	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96222	115	8.4	5.1	360
1404	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96223	115	8.4	4.7	360
1408	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96223	115	8.4	4.9	360
1416	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96220	115	8.4	5.4	360
1403	EXHST BLOWER ON ROOF	.33	1750	3	208	---	2.0	---	---	69275	208	2.0	1.2	500	9
1415	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96242	115	8.4	5.7	360
1410	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96237	115	8.4	5.7	360
1420	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96227	115	8.4	5.5	360
1403	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96235	115	8.4	5.5	360
2203	EXHST BLOWER	.33	1750	3	208	---	2.0	---	---	69275	208	2.0	1.2	500	9
1419	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96226	115	8.4	5.7	360
1406	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96233	115	8.4	5.8	360
1411	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96229	115	8.4	6.1	360
1412	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	06236	115	8.4	5.4	360
2203	EXHAUST BLOWER	.33	1750	3	208	---	2.0	---	W.F.	None	208	2.0	1.4	500	10
1407	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	8.4	4.2	48	96239	115	8.4	6.3	360
1415	DELUGE COMPRESSOR SO	.75	1725	1	115	230	---	8.4	4.2	48	96242	115	8.4	5.8	360
1008	PUMP MOTOR (TANK)	.50	1725	1	115	230	---	8.4	4.2	48	PM@724	115	12.0	8.2	360
1408	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96221	115	8.4	6.1	360
2106	AUXILIARY PUMP MOTOR	2.00	1740	3	220	440	---	8.9	5.6	3.0	41067	440	3.0	2.7	150
1407	DELUGE COMPRESSOR NO	.33	1725	1	115	230	---	6.6	---	48	96239	115	6.6	8.1	360
1415	DELUGE COMPRESSOR SO	.75	1725	1	115	230	---	12.0	6.0	56	96242	115	12.0	8.2	360
1008	PUMP MOTOR (TANK)	.50	1725	1	115	230	---	7.8	3.9	56	PM@724	115	7.8	6.3	360
1408	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	6.6	---	48	96223	115	6.6	8.7	360
1411	DELUGE COMPRESSOR NO	.75	1725	1	115	230	---	12.0	6.0	56	96240	115	12.0	9.0	360
2203	AGITATOR MOTOR	.75	1750	3	230	460	---	2.9	1.5	143T	None	208	2.9	2.2	500
2001	FURNACE BLOWER	.50	1725	1	115	230	---	7.4	3.7	---	None	115	7.4	3.6	1000
1417	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	8.4	4.2	48	96235	115	8.4	10.1	360
2106	EXHAUST FAN	.50	1725	1	115	230	---	7.8	---	---	78181	115	7.8	7.5	500
1411	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	6.6	---	48	96229	115	6.6	11.0	360
1419	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	6.6	---	48	96226	115	6.6	10.7	360
1405	DELUGE COMPRESSOR SO	.50	1725	1	115	230	---	6.6	---	48	96235	115	6.6	11.0	360
1418	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	6.6	---	48	96224	115	6.6	11.1	360
1414	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	6.6	---	48	96230	115	6.6	11.1	360
1412	DELUGE COMPRESSOR NO	.50	1725	1	115	230	---	6.6	---	48	96228	115	6.6	11.1	360
2106	HEATER FAN MOTOR	---	1725	1	115	230	---	2.9	---	---	96451	115	2.9	2.6	1500

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	AN HRS	METER AMPS	
1402	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	96238	115	6.6	10.7	360	
1410	DELUGE COMPRESSOR S0	.33	1725	1	115	-----	48	-----	96237	115	6.6	11.3	360	
1409	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	96222	115	6.6	11.3	360	
1413	DELUGE COMPRESSOR S0	.33	1725	1	115	-----	48	-----	96231	115	6.6	11.3	360	
1416	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	96220	115	6.6	11.4	360	
1406	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	96233	115	6.6	11.6	360	
2202-3	ROOF TOP EXHST BLOW	1.00	3450	3	208	-----	2.8	1.4	68076	208	2.8	2.6	500	
1403	DELUGE COMPRESSOR S0	.33	1725	1	115	-----	48	-----	96236	115	6.6	11.4	360	
1420	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	96227	115	6.6	11.5	360	
2202-2	COMMUTATOR MOTOR	.50	1725	3	208	-----	2.6	-----	P	94084	208	2.6	2.0	
1405	DELUGE COMPRESSOR NO	.33	1725	1	115	-----	48	-----	P	96234	115	6.6	12.7	
2202-1	COMMUTATOR MOTOR	.50	1725	3	208	-----	2.6	-----	P	94083	208	2.6	2.0	
2202-3	COMMUTATOR MOTOR	.75	1140	3	208	-----	3.2	-----	P	94085	208	3.2	2.1	
2106	CAST SLOW MIXER	.75	1725	3	208	220	440	3.0	-----	-----	-----	750	23	
2106	MIXER	.33	1725	1	115	-----	6.2	1.5	-----	093508	208	3.2	1.6	
1414	DELUGE COMPRESSOR S0	.75	1725	1	115	230	-----	12.0	6.0	-----	115	6.2	6.1	
1105	OIL PUMP MOTOR #1	.50	1725	3	208	440	-----	1.8	.9	D56	PF	12.0	17.4	
2203	BOILER FAN EXHAUST	.50	1725	3	208	220	440	1.7	.8	CP	74156	208	1.8	
2002	AIR COMPRESSOR	1.50	1725	1	115	230	-----	17.0	8.5	CP	93818	208	1.7	
1008	PUMP MOTOR	3.00	3505	3	208	-----	10.1	-----	P	PM0771	208	10.1	7.5	
2203	SLUDGE PUMP	2.00	1140	3	208	-----	7.8	-----	LGH	NONE	208	7.8	5.0	
1109	NO. PRE-HEAT CONVEY	1.00	1755	3	208	-----	4.0	-----	AEIX	NONE	208	4.0	3.9	
1109	SO. PRE-HEAT CONVEY	1.00	1755	3	208	-----	4.0	-----	AEIX	NONE	208	4.0	3.9	
1105	OIL PUMP MOTOR #2	.50	1725	3	208	440	-----	2.0	1.0	D56	PF	208	2.0	
1109	#4 POUR CONV DRIVE	.75	1725	3	208	-----	5.3	-----	PF	87316	208	5.3	4.3	
1139	AIR HANDLER DRIVE	1.50	1730	3	220	440	-----	5.0	2.5	GE48	NONE	208	5.0	4.5
1109	#1 POUR CONV DRIVE	1.00	1725	3	208	-----	6.0	-----	PM0726	208	6.0	4.6	1000	
1109	VACUUM UNIT	5.00	3500	3	208	-----	15.8	-----	K	95860	208	15.8	15.9	
1109	NO. PRE-HEAT BLOWER	1.00	1745	3	200	-----	4.3	-----	-----	-----	208	4.3	3.0	
2106	CAST SLOW MIX MOTOR	.75	1800	3	208	220	440	3.0	1.5	-----	93507	440	4.3	
1109	CONVEYOR DRIVE MOTOR	1.00	1725	3	208	-----	6.0	-----	-----	-----	208	6.0	5.4	
1109	SO. PRE-HEAT BLOWER	1.00	1745	3	200	-----	4.3	-----	-----	-----	208	4.3	3.0	
2106	BURNER MOTOR	.33	1725	1	115	208	230	6.0	3.0	-----	-----	115	6.0	
2203	PUMP MOTOR	5.00	870	3	208	-----	17.5	-----	TGS-BCV	NONE	208	17.5	14.6	
1107	AIR HANDLER DRIVE	1.00	1720	3	208	220	440	4.6	3.4	K	41290	208	4.6	
2202-2	PUMP MOTOR #2	7.50	1750	3	208	220	440	21.2	20.0	CJ4B	NONE	208	21.2	
1008	PIT PUMP #1	7.50	3450	3	208	-----	23.0	-----	LU	PM0726	208	23.0	16.7	
1008	PIT PUMP #2	7.50	3450	3	208	-----	23.0	-----	LU	PM0725	208	23.0	19.8	
1105	TRANSFER PUMP MOTOR	2.00	3460	3	200	-----	6.9	-----	COG4B	-----	208	6.9	5.5	
2106	RAPID MIX	3.00	-----	3	230	460	-----	10.0	5.0	R145T	SC	208	14.6	
2202-2	SEWAGE PUMP MOTOR	10.00	1740	3	208	220	440	30.8	29.0	203	F182TC	208	3.6	
2202-3	PUMP MOTOR #1	15.00	1750	3	208	220	440	42.0	40.0	254T	-----	208	30.8	
2202-3	CENTER PUMP MOTOR #2	15.00	1740	3	220	440	-----	41.0	20.5	326	KG	45252	208	
2202-1	PUMP MOTOR #1	7.50	1750	3	208	220	440	21.2	20.0	CJ4B	-----	213T	21.2	
2202-1	PUMP MOTOR #2	7.50	1750	3	208	220	440	21.2	20.0	OJ4B	-----	213T	21.2	
2202-3	PUMP MOTOR #3	25.00	1180	3	208	220	440	78.0	74.0	CJ4B	NONE	208	78.0	
1105	WATER FEED PUMP #2	7.50	1745	3	200	400	-----	23.4	11.7	DP	-----	208	23.4	
1105	WATER FEED PUMP #1	7.50	1745	3	200	400	-----	23.4	11.7	DP	-----	208	23.4	
1105	BURNER MOTOR #1	10.00	3465	3	200	-----	27.5	-----	TFS BDZ	-----	208	27.5	20.0	
1105	BURNER MOTOR #2	10.00	3465	3	200	-----	27.5	-----	TFS BDZ	-----	208	27.5	20.0	
2106-A	LOW LIFT PUMP MOTOR	20.00	1755	3	230	460	-----	52.0	26.0	K	NONE	460	26.0	
2106-A	RIVER WATER PUMP	20.00	1755	3	230	460	-----	52.0	26.0	K	90161	208	21.0	

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LOCATION	FUNCTION	HP	RPM	PHASE	NAMEPLATE VOLTS	NAMEPLATE AMPERES	FRAME SIZE	TYPE	KAAP NUMBER	LINE VOLTS	NORM VOLTS	METER AMPS	AN HRS	AN COST
2106	WASH PUMP MOTOR	50.00	1170	3	220	440	126. 63.0	504	KF	41063	440	63.0	45.0	1500
2106	WASH PUMP MOTOR	50.00	1170	3	220	440	126. 63.0	504	KF	41064	440	63.0	55.0	1500
2106	#2 PUMP MOTOR	75.00	1775	3	230	460	190. 95.0	365T	C0G46	0429	460	95.0	75.0	1500
2106	#1 PUMP MOTOR	75.00	1775	3	230	460	190. 95.0	365T	C0G46	0428	460	95.0	80.0	1500
1003	SUMP PUMP IN X-RAY	-	-	-	-	-	-	-	-	-	-	-	-	3854
1019	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1017	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
2105-A	PUMP MOTOR	75.00	1800	3	220	440	180. 90.0	505-4	SC	40988	208	180.0	-	-
2105-A	SUMP PUMP MOTOR	2.00	1740	3	220	440	5.6 2.8	-	-	40989	208	5.6	-	-
1102	SUMP PUMP	.33	---	1	115	---	-	-	-	-	-	-	-	500
1205	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1140	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	-	-
2106	TANK STIR	-	-	-	-	-	-	-	-	-	-	-	-	-
2203	GEAR REDUCING PUMP	.50	1775	3	230	460	3.0 1.5	143T	-	96066	-	-	2.4	1000
1019	SUMP PUMP-MEN'S ROOM	-	-	-	-	-	-	-	-	-	-	-	-	500
1019	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	-	-
1065	DEHUMIDIFIER	-	-	-	-	-	-	-	-	-	-	-	-	-
1202	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1107	#1 DIS COOL TUN CONV	.75	1725	3	-	-	5.3	-	L56C	P	NONE	-	3.4	1000
3005	SUBMER SUMP PUMP NW	.33	---	1	110	---	9.0	-	-	-	-	-	-	-
3005	SUBMER SUMP PUMP SE	.33	---	1	110	---	9.0	-	-	-	-	-	-	-
1005	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1006	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1011	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1104	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1127	SUMP PUMP	-	-	-	-	-	-	-	-	-	-	-	-	-
1011	SUMP PUMP	.50	---	1	-	-	-	-	-	-	-	-	-	-
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	---	4.0	-	1B4P	JU	NONE	-	-	-
3017	WATER SUMP PUMP MTR	3.00	3600	3	460	---	4.0	-	1B4P	JU	NONE	-	-	-

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